

OVERSIGHT OF THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

HEARING BEFORE THE SUBCOMMITTEE ON SURFACE TRANSPORTATION OF THE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

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ADMINISTRATION

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WEDNESDAY, SEPTEMBER 19, 1984

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON SURFACE TRANSPORTATION,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:35 a.m., in room SR-253, Russell Senate Office Building, Hon. John C. Danforth (chairman of the subcommittee) presiding.

Staff members assigned to this hearing: Karen Phillips, professional staff member and Loretta Dunn, minority staff counsel.

OPENING STATEMENT BY SENATOR DANFORTH

Senator DANFORTH. This is an oversight hearing on the National Highway Traffic Safety Administration, and I am pleased that the first witness is the Honorable Diane Steed, Administrator of the National Highway Traffic Safety Administration.

STATEMENT OF HON. DIANE K. STEED, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, ACCOMPANIED BY GEORGE REAGLE, ASSISTANT ADMINISTRATOR FOR TRAFFIC SAFETY PROGRAMS; AND BARRY FELRICE, ASSOCIATE ADMINISTRATOR FOR RULEMAKING

Ms. STEED. Thank you, Mr. Chairman. Before I start, I would like to simply summarize my statement since you have it for the record, and let me introduce my colleagues here. To my left is George Reagle, our Administrator for Traffic Safety Programs; and to my right, Mr. Barry Felrice, our Associate Administrator for Rulemaking.

We are very pleased to be here this morning to talk about the activities of the National Highway Traffic Safety Administration. We think we have made some very great strides over the last year.

First let me talk a little bit about Secretary Dole's decision on automatic crash protection. We think her decision represents a very practical commonsense solution to the all too long debate over the best way to protect vehicle occupants during frontal crashes.

As you know, the Secretary has decided that automatic protection will begin to be required in some new cars in just 2 years, September 1, 1986, and will be required in all cars by September 1, 1989, unless by April of that year States representing two-thirds of the American population have enacted mandatory State safety belt usage laws.

We think that the decision represents the very best method to fulfill our mutual safety objectives. We think that it affirms the view that automatic technology should be encouraged and recognizes that lives can be saved immediately through mandatory laws. We are very encouraged by the States' reaction to the decision and by their plans for legislative action.

As you know, we announced at the time of the decision that there were a number of other details that will require further rule-making. These deal with some very technical subjects, such as different kinds of barrier test requirements, a new dummy to be considered, and a few others.

We are actively at work on those and hope to have them wrapped up within the next 3 to 4 weeks. We are also intensifying our efforts on safety belt usage. As of June of this year our 19-city survey shows that our driver safety belt usage is up to about 14.3 percent nationwide. As we look at progress in specific areas across the country, however, where specific companies or groups or even cities have taken up the safety belt usage cause, we see even more dramatic results.

Let me skip just briefly to talk a little bit about the fight against drunk driving. You and other members of the committee are just as familiar as we are with the events that led to the enactment of the 21 drinking age law, and again we thank you very much for your strong leadership in the whole drunk driving effort.

We are hard at work on the rule that will implement the 21 drinking age law, which directs the Secretary to withhold 5 percent of fiscal year 1987 highway construction funds and 10 percent of fiscal year 1988 construction funds from any State that permits purchase or public possession of alcohol by persons under 21. We think it is going to save the lives of many, many of our young drivers.

We see that there is also a continuing and growing public concern about the abuse of alcohol and other drugs. I am very pleased to say to you today that 16 States have now qualified for the Alcohol Incentive Grant Program, the 408 program, that you and your committee were instrumental in putting in place. We think this is a testament to the widespread realization that comprehensive long-term programs are needed if we are to reduce the tragedy of drunk driving.

Child safety seat laws are another area where we have seen some dramatic improvements over the last year or so. And as you know, now all but one State has a child safety seat law. We think we have a long way to go in this area, however, and we plan to intensify our efforts to get people to use those seats in greater numbers and to use them correctly. We have a big problem, as you know, with incorrect usage at this point. In so doing, we are working with the National Safety Council, the Child Passenger Safety Association, and many other groups to improve child passenger safety.

And finally, let me report to you that we are working on guidelines for the States on computerized traffic record systems, under the new provision in the Highway Safety Act that requires us to set aside a certain portion of our 402 funds for that purpose. As you know, the States vary tremendously in their ability to use a computerized traffic record system, and where we see such systems

in place we see dramatic reductions in deaths and injuries in those areas where they have pinpointed their high accident locations.

We met with the State highway safety representatives in Des Moines, IA, last week, and we are working very closely with them to make sure that that money is appropriately used and that those records systems are improved.

That completes the summary of my statement, Mr. Chairman. We would be happy to try and answer your questions.

Senator DANFORTH. Thank you very much. I think you have shown some progress in several areas over the past few months or the past year with respect to passive restraints, with respect to high-mounted rear stop lights, antilacerative windshields, and drunk driving, which was a major accomplishment. I know how strongly the Secretary felt about that and worked personally on it.

Let me ask you, Diane, with respect to the passive restraints/mandatory seatbelt law situation. As I understand it, the Department of Transportation is undertaking a very significant educational program, about \$40 million. Is that per year or over a period of years?

Ms. STEED. It would be a \$40 million educational program, Mr. Chairman. Half of that would be Transportation funds and half of it would be private sector funds. We intend for it to run 4 years.

Senator DANFORTH. \$40 million over 4 years or \$40 million a year?

Ms. STEED. \$40 million a year, public and private, each year for 4 years.

Senator DANFORTH. \$40 million a year, public and private, for 4 years.

How much of that is public? How much of that is the taxpayers' money?

Ms. STEED. About half, \$20 million.

Senator DANFORTH. Now, what is the nature of this campaign? Is it in part a buckle-up campaign and in part a mandatory seatbelt law legislative campaign, putting pressure on the State legislatures? What is the nature of it?

Ms. STEED. The nature of the campaign is that we feel that the public needs information and education about the need to be protected in an automobile. We envision it as funds being spent on about three types of activities.

One would be a general national awareness campaign on safety belts, to a degree and of a nature that we have been unable to fund in the past. We know that there have been a number of safety belt public service announcements, educational efforts, going on in major media markets, but we really have not covered the country.

I know out in the Midwest, when I go home, we do not see very many safety belt ads. So we intend for part of this to be used for a broad national awareness campaign.

We intend for additional funds to be spent to upgrade and intensify our networking efforts. These are our efforts working with groups like the Red Cross, the PTA, and so forth, again to get the safety belt message, the protection message, out to the public through credible spokesmen in society.

The third way the moneys would be spent would be to assist States in their efforts to enact mandatory State safety belt laws. As

you know, there are a number of coalitions that have formed in various States. Michigan has one, Missouri has one, and New York had one, which was largely made up of the medical community.

Senator DANFORTH. This is on mandatory seatbelt laws?

Ms. STEED. Yes; it is. Such coalitions have been successful in working with State legislators to get State safety belt laws passed.

Senator DANFORTH. I am not sure about the idea of trying to lobby State legislatures with Federal money. I am not sure that that kind of philosophical question is one to put to you, but my own view is that buckle-up campaigns are pretty much useless.

If we are going to have advertising, what would be wrong with directing part of the advertising at the use of passive restraints, to increase consumer understanding and demand for passive restraints?

Ms. STEED. I think that the advertising that you will be seeing will be in part not just public funds, but I think you will see some private funds. I know I have seen the new Mercedes ad on television for their new airbag system.

A buckle-up campaign, as you call it—is for the purpose of public education on the need for occupant protection in cars. It is needed because people do not think about having an accident in a car. They simply think, "it is not going to happen to me." I think we have to pose the risk of that accident. We have to pose how effective safety belts are. I think that is important.

Senator DANFORTH. Why the safety belts? That is the question.

Ms. STEED. I think education is important both for State safety belt usage laws and for automatic protection, because, as we know, even in the case of automatic protection, automatic safety belts must be detachable. We want to make sure that when those are installed in automobiles—and the way the rule is written there will be cars so equipped that they are left attached; that they are left as passive.

In addition, we know that for the airbag to work as effectively as it can, we need to have that safety belt fastened, too. I think a lot of people are unaware of that fact.

So I think it is very important that we move forward with an education campaign. But I would emphasize that it is not just media. Media alone we know will not work. We believe that by working with these State coalitions and with these groups in society we really can make some progress in this area.

Senator DANFORTH. Well, my own hope would be that some of the emphasis would be placed on things other than buckling up or mandatory seatbelts. That is, I am very impressed with the few ads that I have seen—magazine ads, television commercials. That really is a very effective message about the importance and the fact that passive restraints work, that airbags work.

A lot of people think they do not. You know they have gotten some bad publicity.

Ms. STEED. That is right.

Senator DANFORTH. But they do work and they do not malfunction, and they do save lives and they have saved lives and they will save lives. It seems to me that if the Government is going to spend \$20 million a year as part of a \$40 million effort, it really stacks the deck if all of that really considerable advertising campaign—

that is a considerable campaign—if a considerable advertising campaign is directed solely at the use of conventional seatbelts.

Ms. STEED. Well, we intend to make available information on passive restraints as part of our ordinary job, because I think you are right, Mr. Chairman.

Senator DANFORTH. As part of your ordinary job. But what I am talking about is this extraordinary job of having a very large media campaign on the question of auto safety.

Ms. STEED. I understand. I think you will see this information as a part of the overall \$40 million effort. We also hope that the private sector, including the auto companies and the insurance companies will contribute. We have talked to both, and have received some proposals from both.

Senator DANFORTH. Well, the auto companies are not going to advertise airbags, I do not think.

Ms. STEED. But the insurance companies are, and in fact have made several proposals to us to get that information made available. So you will see it a part of the overall campaign.

Senator DANFORTH. Will part of the Government's money—the Government's \$20 million—be used for advertising the fact that airbags work and that they are accessible and cheap and that they do not malfunction and that they save lives?

Ms. STEED. My understanding is that our \$20 million will be used to get people to wear safety belts, and to leave the safety belts attached.

Senator DANFORTH. I think that that is the wrong approach. I mean, what can we do to expand that for airbags? I mean, we have talked about this in the past. I think buckle-up campaigns are silly.

Here is a keyring that Ford puts out and it says: "We need you, Ford. Buckle up." I suppose that is part of a buckle-up advertising campaign. I do not think it does any good.

Ms. STEED. Well, I would like to correct that impression. It is much broader than an advertising campaign. We know that media and keyrings and so forth will not work by themselves.

What we intend to do is a real education campaign; to tell the public: Here is what can happen to you in a crash. And as I said, when we look at the selected areas where we have worked with companies, with employers' policies, and with various organizations we see real improvements. Where these organizations have an educational effort showing people what can happen in the automobile, showing them how safety belts work, showing them how passive restraints work, we see an enormous increase in safety belt usage.

I think that is important for both manual safety belts, for automatic belts, and for airbags.

Senator DANFORTH. Well, I think seatbelts are great, but I just hope that we do not so focus attention on the seatbelt question that we lose sight of this technology.

Ms. STEED. I am sure that we will not lose sight of the technology.

Senator DANFORTH. It is my understanding—and I do not know, but I have heard somewhere—that even with mandatory seatbelt laws, still half the people will not use seatbelts.

Ms. STEED. I think you should look at the success that Great Britain had. This is really the model for our whole campaign. They

started out with a plan for getting a mandatory usage law. For about 2 years before enactment they worked on a very intensive educational effort in the country, and they now have about a 90- to 95-percent usage rate.

You cannot depend on the law alone, we know that education is important. We know that very strict enforcement is important, and we intend to work on both of those.

Senator DANFORTH. I applaud what the Secretary did this past summer on passive restraints, on the whole new rule, for the reason that I was not expecting anything. It was much better than what I had hoped for.

But I just have to say that, you know, our party, your Administration, we talk so much about the fact that we do not want a lot of Government intrusiveness, we do not want the heavy hand of Government reaching into people's lives. Well, mandatory seatbelt laws really are the heavy hand of Government. You are telling people what to do.

It just seems to me that it is much less intrusive and much less resented to treat crash protection as we treat safety glass or collapsible steering columns, bumpers, or whatever, and build them into the car so people do not have to feel they are about to be arrested.

But you know, this is a step forward, there is no doubt about it, and I applaud what the Secretary did. I want to make that clear. But I still believe that there is no substitute for airbags and that we should not just divert our attention from the main issue, which is airbags; and that this \$40 million advertising campaign, if it is really a seatbelt buckle-up type campaign, is wrong-headed.

Ms. STEED. We think that you are going to see a couple of things happen. First of all, I think one big misconception about the Secretary's decision is that it is an either-or decision: Either mandatory State safety belt laws or automatic protection.

We do not see it that way. We carefully did the timing and designed the decision so that we would see the new technology being brought out as quickly as we possibly could get it on the road. I think as we get numbers of these cars equipped with automatic protection, both airbags and automatic belts, out on the road, people will start focusing on the need for protection in automobiles, they see the new technology. There may be other technology out there that we do not know about yet.

I think the public is going to like that automatic protection and I think we are going to see a lot of it there and a lot of acceptance and usage.

Senator DANFORTH. They will like it if the Administration—particularly if it is going to be advertising its position—they will like it if the Administration makes it clear that these devices do work and that they would save lives, and that they are very effective and they do not malfunction. You do not just drive down the middle of the street and have the airbag blow up on you. It works.

Let me ask you about bumpers. What is the latest on bumpers? Are we stuck with the 2½-mile-an-hour bumper, or can we get back to a real bumper?

Ms. STEED. Well, we are looking at bumpers, Mr. Chairman. As you know, we changed the standard from 5 miles an hour to 2.5.

We also take our statutory responsibility very seriously and we are looking at the effect of the 2.5 bumper.

We have collected a lot of information to compare 5-mile-an-hour bumpers with 2½-mile-an-hour bumpers. We are spending about \$1 million to do that. We have results back on several parts of that study. But we will not have complete results on the insurance effects of the 2½-mile-an-hour bumpers until next year.

Senator DANFORTH. Well, the Insurance Institute believes that it has the compelling case, and I think it is compelling. They have done all these crash tests and the difference in an ordinary fender-bender between having a 2½-mile-an-hour bumper and a 5-mile-an-hour bumper is the difference between a zero or close to zero bill for repairing your car and maybe \$300, \$400 worth of a bill.

Ms. STEED. The Insurance Institute crashes individual cars to see the results, and you are right, the results of different bumpers are like night and day; 2½ is different from 5, is different from 7 miles per hour.

What we are trying to do and what we must do under the statute is see what the overall effect is on all cars, and that is what we are trying to measure.

I would point out one other thing that we tried to do on bumpers in cooperation with the manufacturers. Through a notice of proposed rulemaking, we offered to test bumpers to see what different cars would do and to publish those results. We got no takers.

So what we did instead was let a contract to develop a test methodology for testing bumpers and publishing the results as a rating system. We conducted early tests and got some promising results, but we had only done two or three cars and we were not satisfied with that.

So we expanded it to about eight or nine cars. We now have a methodology. The contractor will have a report to us and we should be able to publish that report, hopefully in the next 2 to 3 weeks.

That system then we would expand to a few more cars. If the relationship between our test results and this test methodology and the relationship we see developing between the insurance information looks as good as it does now, we think we will be able to have a bumper rating system that we can provide to consumers so that they can tell what bumper system they have on a car and what protection it will provide.

Senator DANFORTH. Why not just reinstate the 5-mile-an-hour rule?

Ms. STEED. Well, we need the information from our contract to see—

Senator DANFORTH. Diane, let me just put this to you. I think you are just going back to square 1. You know, I mean it is like launching the next space shuttle by starting out making paper airplanes.

I do not understand any argument for a 2½-mile-per-hour bumper other than the fact that the car companies are selling parts. I do not understand any justification for a 2½-mile-per-hour bumper. It is not justified by fuel efficiency, it is not justified by anything, as I understand. And we have had a couple of hearings in here. There is no justification for a 2½-mile-per-hour bumper other than the very cynical justification that the auto companies,

in addition to selling cars, sell parts and they make a profit on fixing cars that have been damaged in fender-bender type accidents.

I think that that is a very questionable type of subsidy that we are providing for the auto industry if we have a 2½-mile bumper standard which is justified only because it helps auto companies make money in parts sales. Is there any possible reason for sticking with the 2½-mile bumper?

Ms. STEED. In our regulatory analysis we have to take into account the frequency of bumper accidents for all consumers. To any given consumer, you are absolutely right, it may cost more. But there are many people who do not have a bumper accident, and the statute requires us to take into account the most cost-effective system for all consumers.

Senator DANFORTH. But Diane, if people do not have accidents you do not need any bumper at all.

Mr. FELRICE. Mr. Chairman, the data that the agency had before it at the time of the decision 2 years ago showed—and we admitted it in our regulatory analysis—that if you had an accident there clearly would be more damage with the 2½-mile-an-hour bumper as compared to a 5. That was never in question.

But as Ms. Steed said, one of the issues before us was how often people get involved in such low speed accidents. Some people do not at all. In fact, we found out about 85 percent of the crashes under 5 miles an hour also occurred under 2½ miles an hour.

Therefore, in those crashes the car would be as well protected with the 2½-mile-an-hour bumper as it would with the 5-mile-an-hour bumper.

Senator DANFORTH. I'm sorry. You know, with all due respect, you are too smart to have thought of that argument.

Mr. FELRICE. Thank you, I think.

Senator DANFORTH. That is like saying, look, why should people have motorcycle helmets on, because most people do not fall off motorcycles? I mean, the whole point of any of this stuff is if you have accidents, and almost everybody has fender-benders. I would say in Washington everybody does have fender-benders.

Mr. FELRICE. It boils down to the meaning of the statute, which tells us to save the public, which included people who owned cars, people who did not own cars, people who got into accidents, people who did not get into accidents. We had to factor everything in.

Senator DANFORTH. That is absolutely ridiculous. That is taking an absurd position for no known reason. There is speculation about the reason: namely, that we are just trying to help the car companies and that they like to be in the business of selling parts.

Mr. FELRICE. Well, I do not think that is true.

Senator DANFORTH. What other justification is there for a 2½-mile-an-hour bumper?

Mr. FELRICE. That was the reason. It was based on the record before the agency. It was based on the analysis of insurance data and frequency of crashes. It was based on crash tests that we had conducted, that auto companies had conducted. That is what the data showed.

Senator DANFORTH. The data shows that the 2½-mile-an-hour bumper is preferable to a 5-mile-an-hour mile bumper?

Mr. FELRICE. Not if you are in a crash.

Senator DANFORTH. If you are looking at it it is just the same?

Mr. FELRICE. Some people say we are going back to where we were before there was any bumper standard. That is not true, because prior to any bumper standard the bumpers were probably 1½-mile-an-hour bumpers.

Ms. STEED. I think there is another way to look at it, too, Mr. Chairman. You asked the question, Does it show that 2½-mile-an-hour bumpers are better? No; but it does show that 5-mile-an-hour bumpers simply were not meeting the statutory criteria. That is why we are doing this research.

Senator DANFORTH. Diane, what statutory criteria are the 5-mile bumpers not meeting that the 2½-mile bumpers are meeting?

Ms. STEED. Based on all of the public record and our interpretation of the statutory criteria that we have to take into account all of those folks who do not have bumper accidents also. And that, Mr. Chairman, I think is going to be decided in the current litigation.

Senator DANFORTH. I am a lawyer. Courts decide silly things. I have never heard of any proposition sillier than that. I mean, if that prevails in litigation we really have some crazy judges around here. I do not get it.

Well, could you try to accelerate this matter, do you think? You know, it is like dealing with the Japanese and getting imports into Japan. They always have some reason why it cannot be done. There is some technical reason why it cannot be done.

And you know, we can go on with studies, contractors doing studies, analyses, what happens to people who never take their car out of the garage. We had better factor that in. But can we get on with it?

Ms. STEED. I would like to accelerate it as much as possible. As a matter of fact, we have looked at that possibility. Our problem—and I am open to any suggestions that anyone has for solving that problem—is that the insurance data that we need, we can only get about 6 months after those cars have been on the road.

So we are waiting on some insurance data that we can get by contract. It is generally the State Farm Insurance data that we are working with and it is very slow in coming in.

Senator DANFORTH. I want to say, I know no rationale for the 2½-mile bumper other than an improper one, really. I cannot understand any reason why the Government wants a 2½-mile bumper standard, other than to get in the tank with the car companies. I just do not get it.

I mean, if there was some logical reason, all right. But I really think you are dragging your heels on it. And as I say, you have had some positive things that you have done this year, and I do not want to sound as though I am constantly beating on DOT, except that I am.

But this is really an absurdity, I believe, and it is costing people money. It is costing them money. It is costing them money when they have accidents and it is costing them money in their insurance premiums. It is costing the public dollars, not to mention aggravation, you know. I mean, the aggravation of getting your car fixed every time you run into something in a parking lot.

So, I hope you get on with this. I mean, it would really be a major step, I think, to reinstate a 5-mile-an-hour bumper.

Splash and spray. You know, in 1982 we required DOT to issue a standard requiring trucks to install splash and spray protection devices, and to my knowledge nothing has happened. What is the problem there?

Ms. STEED. We have prepared a notice of proposed rulemaking, Mr. Chairman. The Secretary has signed and sent it to OMB for clearance. We find we have a practical situation here where we did a laboratory test to find out what the best kind of requirement would be—different kinds of flaps, different performance requirements, how much can we clear up the cloud of spray that comes out of large trucks.

We found in the laboratory tests, when measuring it with electronic laser devices, splash and spray devices—I find it hard to say that. Only in Washington can you call something a splash and spray suppressant device instead of a plain old ordinary mud flap.

We found that they did reduce splash and spray in a laboratory test. We then took these same devices out on the road in Fort Stockton and we found that the same flaps, put on the same trucks, tested the same way in a practical situation, to the human eye may not be producing the same kind of a reduction in that cloud of spray in the real world. Yes, a laser can measure it, but we are not sure that the human eye can.

We conducted another series of tests last February out in Fort Stockton and we got somewhat better results than we had before. But again, it is looking like we have a practical problem of what happens in the real world versus what happens in a laboratory.

We decided, however, to move ahead and put the notice of proposed rulemaking out. We point out these practical problems to the public and ask for any public comment that we can get on it, because I would not want to, and I do not think you would want to, require something that in the real world simply is not solving that problem. There is no question about it, it is a very real problem.

Senator DANFORTH. Well, if it is useless, of course. But let us find out about that.

Ms. STEED. Absolutely. We have got some pictures and some video tapes of our tests. And again, the rulemaking we hope will be out. It is over at OMB now. We would be happy to sit down with your staff and go through the test results after we get them back.

Senator DANFORTH. OK. Now, side impact protection. In 1982 NHTSA terminated its rulemaking to upgrade the side impact crash protection standard. Any good news on side impact?

Ms. STEED. I think so. We have continued our research and have made a lot of progress on that research. We are in the process now of summarizing what we have learned and preparing a notice of proposed rulemaking. We have developed a new testing device, a new side impact dummy, some testing procedures, and some injury criteria.

We are now in the process, as I said, of putting that together as a notice of proposed rulemaking. I hope to have that out early next year, maybe February.

Senator DANFORTH. Diane, just a general question. Anything else you want to tell us? Anything else that is in the works as far as NHTSA is concerned?

Ms. STEED. I think, even though we have made progress on the safety belt front, the automatic protection front, and alcohol, that the job is far from over. The agency still has a great deal of work to do. I think side impact is a very big question that we need to work on, and I think better anthropomorphic devices, better devices that will allow us to measure injury, that would replicate the human body, is a very important area that we are working in and hope to make some progress in.

One area we do not know much about that I am pushing very hard is in the drug area. We are just beginning some experiments just now with the Los Angeles Police Department, who think they have a good drug recognition and testing procedure. We are about to do some testing on that procedure.

I think the elderly driver is a question that the agency has not paid much attention to. By 1990 we are going to have about 12 percent or a little more of our population as elderly drivers. So we are going to begin some work in that area.

I think in emergency medical services we have taken a big step forward this last year in getting the emergency medical services community to help us write some standards that will be more focused and will be used out in the real world. So I think we have a number of areas where we are working very hard and we hope to be able to report progress to you in the coming years.

Another one that I would point out is work on lighting. That is going to be a very big priority of mine. I think the agency can do a better job than we have done in the past of coming up with a reasonable performance standard for lighting, rather than saying you will have two bulbs or four bulbs and taking up a lot of our time and expertise answering petitions from the industry, when we ought to be focusing our attention on other research and moving forward in that area.

Senator DANFORTH. Thank you very much for being with us.

Ms. STEED. Thank you.

[The statement follows:]

STATEMENT OF HON. DIANE K. STEED, ADMINISTRATOR, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Mr. Chairman and members of the subcommittee, I am pleased to appear today to testify on the activities of the National Highway Traffic Safety Administration during the last year. Much has happened, and I am pleased that you found time in the closing rush of the Congress to allow us to report to you. With me are George Reagle, our Associate Administrator for Traffic Safety Programs, and Barry Felrice, our Associate Administrator for Rulemaking.

First of all, I can report that we have moved ahead dramatically on two issues of great consequence to safety: occupant protection and alcohol.

OCCUPANT PROTECTION

The Secretary's decision on Federal Motor Vehicle Safety Standard No. 208, Occupant Crash Protection, represents a practical, common sense solution to the all too long debate over the best way to protect vehicle occupants during frontal crashes. Automatic protection will begin to be required in some new cars by September 1, 1986, and will be required in all passenger cars by September 1, 1989, unless by April 1, 1989, States representing two-thirds of the American population have enacted mandatory safety belt use laws. We believe that the decision represents the

best method to fulfill our safety objectives. The decision thus both affirms the view that automatic protection technology should be encouraged and recognizes that lives can begin to be saved immediately through mandatory use laws. We are pleased and encouraged by the States' reaction to the decision, and by their plans for legislative action. In short, the decision is intended to save lives quickly, by a combined thrust toward automatic protection and mandatory use laws.

Although the basic decision has been made, we are at work on a number of details. Some of these we noted in the preamble to the July decision as subjects for further rulemaking. These include further public comment on the 30 mph angular barrier test requirements, the development of new injury criteria, and the use of the Hybrid III dummy, among others. Other issues have been presented by the 15 petitions we have received for reconsideration of the July decision. The petitions range from complete rescission of the automatic restraint requirements to those which suggest fine-tuning adjustments in the phase-in procedure or in the method for determining the population covered by mandatory use laws. We are committed to a prompt resolution of all remaining questions before us.

As we complete the rulemaking on automatic occupant protection, we are also intensifying our efforts to increase safety belt usage. As of June 1984, our 19-city survey showed a usage rate for passenger car drivers of 14.3 percent. In certain areas, however, focused programs have shown dramatic increases. In Chapel Hill, North Carolina, for example, incentive programs for belt use brought the rate from 24 percent up to 41 percent in less than a year. In Helena, Montana, a similar program moved the rate from 4 percent to 22 percent.

We are now working with New York officials to help prepare for January 1, 1985, when that State's mandatory use law becomes fully effective. We are participating in statewide studies of belt use and in the preparation of public information materials, and we will be reviewing the effect on safety belt use as the law goes into effect. We have great hopes that New York's experience will show the way for other States to follow.

Within NHTSA, I have established a centralized safety belt education program that will devote its efforts to working with public and private sector organizations to help them to encourage further increases in usage and assist States with their passage of mandatory safety belt use laws. This will form the heart of the Departmental effort announced by the Secretary to press for the passage of these laws.

ALCOHOL

I want to turn now to the second area of great progress this year—the fight against drunk driving. You and the members of your subcommittee are intimately familiar with the events leading to the enactment of Pub. L. 98-363, which directs the Secretary to withhold 5 percent of fiscal year 1987 Federal highway construction funds and 10 percent of fiscal year 1988 funds from any State that permits the purchase or public possession of alcohol by persons under 21.

We have long been aware of the deadly connection between young drivers and alcohol. The new law is a landmark in the effort to break the connection and to reduce the appalling loss of life among young drivers. Experience in States that have already raised the minimum drinking age leads us to believe that nighttime fatal accidents among drivers under 21 will fall by about 25 percent in States that raise the minimum drinking age from 18 to 21.

We are working with the Federal Highway Administration to issue regulations to implement the new law. We hope to have the regulation in effect by the time the State legislatures are in session in early 1985. We expect that many States will enact 21 drinking age laws rather than risk the loss of highway construction funds, and that Public Law 98-363 will achieve its intended effect.

There are many signs that there is a growing public concern about the abuse of alcohol and other drugs. We can report that 16 States have now qualified for incentive grants for drunk driving programs under 23 U.S.C. § 408. This State action is a testament to the widespread realization that comprehensive, long-term programs are needed if we are to reduce the tragedy of drunk driving. We are working with additional States in an effort to encourage them to make their alcohol programs eligible for 408 grants. The energy and commitment we have found at all levels encourages us about the future success of these programs.

As we worked to discourage drunk driving, we are also intensifying our work on the problem of drugged driving. In Public Law 98-363, Congress wisely added a drugged driving criterion to the Section 408 program to encourage States to focus on methods for detecting and dealing with drivers who abuse drugs. Because of the diversity of drugs and the difficulty of measuring their pressures and effects, they

present a particular challenge to law enforcement. We are engaged in several research efforts to improve detection techniques and will share our findings with State and local governments.

CHILD SAFETY SEATS

I can also report that we are moving ahead on other issues touched by Public Law 98-363. Child passenger protection programs, which were the principal subject of the bill before the age 21 drinking amendment was added, have been a focus of highway safety program for several years. Now that all but one State have enacted child safety seat laws, it is essential for the States to make their laws more effective. We are developing guidance for the States regarding the use of the 8 percent of their section 402 highway safety funds that the law requires them to use for child safety seat programs. With the new State child safety laws, usage rates have moved steadily upwards and now stand at about 45 percent for infants and toddlers combined. We must do more not only to increase this rate but also to ensure that the seats are used correctly. We are working with the National Safety Council, the Child Passenger Association, and other organizations to improve safety for children traveling by car.

COMPUTERIZED TRAFFIC RECORDS

Finally, I can report that we are working with the States to develop guidance regarding the use of the section 402 funds to be set aside for computerized traffic record systems. The States vary tremendously in their use of computers. We are working to help spread information about successful State applications to those States which are in an earlier stage of development. After meeting with the State highway safety representatives in Des Moines last week, I think we have good ideas about how to tailor our guidance so that the funds will be used to best advantage.

Mr. Chairman, this completes my prepared statement. My colleagues and I would be glad to try to answer any questions you might have.

[The following information was subsequently received for the record:]

QUESTIONS OF SENATOR DANFORTH AND THE ANSWERS THERETO

Question. I understand that nearly half of the 38 new cars and trucks tested recently by NHISA failed to protect front-seat occupants from probable death in 35 mph crashes. Please provide the specific results of these tests to the Subcommittee. ~~What is your~~ evaluation of these results; are new cars safer or less safe than their predecessors?

Answer. The agency does not view the results of the New Car Assessment Program (NCAP) tests as a measure of whether the vehicle will "protect front-seat occupants from probable death in 35 mph crashes." Rather, they provide a relative comparison within the same size class of the crashworthiness and safety performance built into new production vehicles.

In the 1984 NCAP 35-mph crash tests, approximately 60 percent of the occupants in the 38 vehicles met the Head Injury Criteria (HIC) requirements of FMVSS No. 208. "Occupant Crash Protection," which requires testing at 30 mph. In 1983, the comparable number was 56 percent, while in 1981, it was 35 percent. Attached is a list of the test results for all the vehicles tested in the NCAP since 1979.

Exact comparisons between years are not possible due to the wide mix of vehicles tested. For example, the 1984 NCAP vehicle mix contained a larger number of vehicles which would tend to do poorer than some of the vehicles tested in previous years. Examples are light trucks, vans, multipurpose vehicles and subcompacts.

From an NCAP perspective, the performance of vehicles with respect to HIC and chest injury measures has improved considerably since the initial years of NCAP tests. The downward trend in dummy injury measures is a clear indication that the crashworthiness performance of vehicles, as measured in the NCAP, is improving. It is important to note that relative safety of the on-the-road vehicle fleet cannot be judged on the year-to-year averages of the NCAP.

Question. What do you envision as NHTSA's safety agenda for 1985?

Answer. In 1985 I intend to continue NHTSA's balanced program of motor vehicle and highway safety activities. This program seeks the best solutions to the Nation's highway safety problems by addressing both the driver and the vehicle.

The initiatives undertaken with respect to occupant protection are a good example of this approach. In the rulemaking area we will address a number of outstand-

ing technical issues whose resolution is necessary to implement fully the FMVSS 208 rule announced in July 1984. We are also embarking on a major public outreach program to explain to the public the safety benefits resulting from the use of both active and passive occupant protection. Also we will continue with three airbag technology demonstration programs.

In the highway safety area the emphasis on alcohol countermeasures and emergency medical services will continue. A number of States have already qualified for the alcohol grants established by the 408 program, and we will continue to encourage the remaining States to participate in this important program. As we work to discourage drunk driving, we are also upgrading our work on the problem of drugged driving.

Major activities in vehicle rulemaking will be to propose to upgrade the side impact protection requirements, and to work toward a headlighting performance standard which will allow flexibility for the introduction of new lighting technology. We also intend to continue our work in harmonization of safety standards and our new car assessment program.

These activities will be supported by a research program that includes the accident data collection systems for fatalities and injuries; research for heavy duty vehicles; crashworthiness research for passenger cars and other light vehicles; and crash avoidance research, as described in greater detail in our answer to Question 3.

Question. Is NHTSA currently conducting any research on the subject of handling and braking characteristics of cars? Do you believe this issue should be a high priority item for the Department?

Answer. NHTSA is systematically pursuing crash avoidance research. Our programs consists of efforts to improve our understanding of the causes of vehicle handling and stability-related accidents, and activities to improve our capability to study accident-related behavior of both vehicles and drivers.

One effort to improve our understanding of accident causation focuses on those single car accidents which resulted in specific types of accidents. We are using our NASS and FARS data bases, together with State data bases, to understand the circumstances which led up to the accidents, and to identify those vehicles, or types of vehicles, which may be more susceptible to being involved. These analyses may point to changes in the vehicles' steering, suspension, tires, or braking system design.

With respect to handling and stability, there is a need to evaluate how vehicles perform as they approach their limits. We are therefore pursuing our work to improve our capability in the area of performance modeling.

A closely related area in which we are developing a program, is in the understanding and modeling of the driver's responses during pre-crash maneuvers. Further knowledge in this area will also assist in the development of analytic models that are valid for predicting vehicle response under pre-crash conditions.

In addition, we have begun a program of experiments at our Safety Research Laboratory in Ohio, to quantify those vehicle stability and control parameters needed for computer simulation and analysis. The goal of the program is to design and construct a unique measurement device which will allow us to characterize the incremental wheel and suspension movements for any type of operating maneuver such as steering, braking or acceleration. We are also measuring tire cornering force and torque data of a wide variety of modern high pressure radial ply tires at the Cal-span Tire Test Facility. We have already established a computerized tire parameter data base at our Safety Research Laboratory to allow mass storage and retrieval of this information.

In summary, we have an active program in progress to investigate vehicle braking, handling and stability.

Question. Critics of the NHTSA recall program charge that the number of public cases opened in fiscal 1983 by NHTSA was the lowest figure for an entire year in NHTSA's history. Is this true? If so, to what do you attribute the low number of recall cases? Has NHTSA undertaken more recalls in fiscal 1984?

Answer. The National Traffic and Motor Vehicle Safety Act provides that safety defect recalls are initiated in two ways: through voluntary action by manufacturers, and through an order issued by NHTSA. Almost all recalls are initiated voluntarily by manufacturers. The agency is authorized by law to investigate potential safety-related defects and may order a recall when the manufacturer fails to do so voluntarily. In the history of the agency, it has been necessary to order a recall only 7 times.

Our investigative process consists of three levels of investigative activity: Preliminary Evaluations (Inquiries), Engineering Analyses, and formal Defect Investigations. It is not true that investigative activity is at the lowest in NHTSA's history.

In Fiscal Year 1983, NHTSA opened 102 new investigative actions, which was higher than 3 of the 6 prior years and only 22 fewer than the peak level of 124 in Fiscal Year 1978. We believe that the charges of inactivity arise from a misunderstanding about the Inquiry phase of the process. We added the Inquiry phase in 1981 to allow a more structured approach to weeding out factual situations that do not indicate the existence of a safety-related defect before deciding to open a more detailed investigation (e.g., Engineering Analysis) into likely defects. The Inquiries permit a more efficient use of our resources, allowing more time and talent to be spent on serious safety problems than the previous system permitted, while ensuring better documentation of our decisions. Inquiries take the place of those Engineering Analyses that were opened and, because there was no likely defect, were closed without detailed investigation. They also replace the pre-1981 practice of conducting informal, undocumented reviews of possible defects. We believe the Inquiry gives us a more flexible and effective enforcement tool than before. Starting in Fiscal Year 1985, the "Inquiry" phase was renamed "Preliminary Evaluation" to more accurately reflect the nature of the investigative activity involved.

With respect to recalls, most are initiated by the manufacturers entirely voluntarily with no prior NHTSA knowledge or involvement. Such voluntary recalls have ranged from 70 percent to 90 percent of recall campaigns each year and from 30 percent to 80 percent of the number of vehicles recalled each year. Even when NHTSA is involved by conducting an investigative action, the manufacturers usually agree to voluntary recalls. As noted previously, the agency has used its authority to order recalls only 7 times in its history. The total number of defect recalls in FY 1984 was 133 compared to 119 in FY 1983.

Question. It is estimated that 35,000 vehicles will be imported into the United States during 1984 that are not certified to meet applicable safety standards at the time of importation. These vehicles are required to be modified in order to bring them into compliance with the safety standards. However, the Committee has received evidence that a significant number of these vehicles either have not been modified in any form or have been only partially modified.

a. Please explain NHTSA's procedures for determining whether the necessary modifications are indeed made to such vehicles. Are these procedures adequate to assure compliance with existing safety standards?

Answer. The National Highway Traffic Safety Administration shares the responsibility with the U.S. Customs Service for monitoring the importation of noncomplying vehicles and equipment into the Customs territory of the United States.

Section 108 of the National Traffic and Motor Vehicle Safety Act of 1966 (the Act) (15 U.S.C. 1391 et seq.) prohibits the importation of a motor vehicle not conforming to the Federal Motor Vehicle Safety Standards (FMVSS) except under certain conditions to be prescribed by the Secretary of the Treasury and the Secretary of Transportation as may be appropriate to ensure that the vehicle will be brought into conformity. Title 19, Code of Federal Regulations, Part 12.80 (19 CFR 12.80), "Importation of Motor Vehicles and Items of Motor Vehicle Equipment," was jointly issued by the two Secretaries in implementation of section 108(b)(3) of the Act.

In carrying out these responsibilities, NHTSA works closely with the U.S. Customs Service, both at headquarters and at the many ports of entry around the country.

When a vehicle (or equipment) is imported, the importer completes an entry declaration form (HS-7) and provides it to the Customs Service at the port of entry. If the vehicle (or equipment) is not certified by the original manufacturer, a bond must be posted with Customs in the amount equal to the value of the vehicle, as assessed by Customs, plus any applicable duty.

Only after the HS-7 is completed and bond has been posted, will the Customs Service release the vehicle to the importer. Customs then forwards the completed HS-7 form to NHTSA, which assigns the case a Preliminary Customs Investigation (PCI) number. Relevant information is then entered into NHTSA's computer identifying the importer of record, port of entry, type of vehicle and the vehicle identification number. The automated system permits quick and accurate traceability of imported nonconforming vehicles. Within a few days, NHTSA sends an information package to the importer identifying specific standards applicable to the model year of the vehicle imported, an HS Form 189 (Statement of Compliance), and advising the assigned PCI number which is to be used on all future correspondence.

The HS Form 189 provides the importer with summary information concerning the standards and, at the same time, becomes the formal statement of compliance when completed and signed by the importer. It is upon the basis of this document plus other submitted supporting material that a judgment of compliance can be made by the analysts who review each individual case. The other material submit-

ted in support of the HS Form 189 includes such things as photographs of modifications made, detailed work statements that describe the work performed to bring the vehicle into compliance with all of the applicable FMVSS, together with receipts for the parts and labor involved. In some cases, mathematical calculations prepared by the importer or modifier are also submitted to establish that performance levels required by a standard can be achieved.

If a completed HS Form 189 is found to offer inconclusive evidence of compliance, an HS Form 88 is then sent to the importer indicating specifically the additional information that is required. When this is returned, a final decision can be reached on whether the car is in compliance, permitting the bond to be released by Customs. If Customs does not receive a bond release letter within 180 days of entry, it directs the redelivery of the vehicle for export.

Question. What is the current level of resources being devoted to ensuring that vehicles are modified to meet applicable safety standards? Do you believe additional personnel or funding are needed to carry out NHTSA's efforts in this area?

Answer. In FY 1984, \$665,000 were expended on computer services and contractor support for the importation surveillance program plus eight NHTSA headquarters personnel. In addition, regional personnel are utilized to assist in the inspection of vehicles prior to release of bond to assure that the importer has made the modifications noted on the compliance statement. Since the need for assistance from the regions is assessed on a case-by-case basis, time devoted to this activity by regional personnel varies considerably. It is not, however, a substantial portion of time on the part of the regional staff.

Current resources are adequate to carry out our responsibilities.

Question. Please explain what procedure is followed by NHTSA when it determines that a vehicle has not been modified or that whatever modifications have been made are inadequate.

Answer. When NHTSA determines that a vehicle has not been modified or that the modifications are inadequate, it informs the U.S. Customs Service of its determination and recommends that the importer be asked to redeliver this car to the Customs Service. As appropriate, NHTSA can recommend a sum to be levied against the import bond. This sum serves as a substitute for the civil penalty that could be imposed under the joint regulations or for violations of the National Traffic and Motor Vehicle Safety Act.

Question. Please provide an explanation of what authority the Agency has to issue fines for non-compliance with existing safety standards without also requiring recall and/or modification to bring the vehicle into compliance.

Answer. The agency does not "issue fines" for gray market imports. Instead, we proceed by levying against the bond filed by the importer. This expeditious procedure is expressly referenced by paragraph 108(b)(1)(3) of the Act, and was adopted in the joint import regulations as an appropriate means to ensure that the motor vehicle would be brought into conformity.

Question. How many improperly modified vehicles have been confiscated or removed from the country during the past 12 months?

Answer. Since April of 1984, when separate records by penalty category were first initiated, NHTSA has made 180 recommendations to Customs involving redelivery of vehicles to ensure their export or abandonment to the United States.

Question. How does NHTSA plan to implement the recently-announced passive restraint requirement for non-U.S. certified vehicles imported into the U.S.?

Answer. We will implement and enforce the passive restraint requirements in the same manner as the requirements of other applicable standards. Where the requirements are applicable, based upon the date of manufacture of a non-U.S. certified vehicle imported into the United States, we will require modification and evidence of completion before we permit the bond to be released.

Relative to the phase-in requirements of the passive restraint standard, commercial (gray-market) importers of non-U.S. certified vehicles, as statutory manufacturers under the Act, will be treated in the same way as manufacturers who certify that their vehicles, as originally manufactured, comply with all of the FMVSS requirements.

Question. In view of the large number of non-certified vehicles being imported into the United States, and in view of the fact that many vehicles are not modified or are improperly modified, does NHTSA have plans to revise and tighten its procedures for these vehicles?

Answer. We are concerned about any possibility that the large and growing number of non-certified vehicles being brought into the United States may create a safety problem if they are not brought into conformity with the safety standards. We are being especially observant for problems in this area and will take appropri-

ate action when indicated. We will, of course, revise our procedures to accommodate the provisions dealing with theft prevention contained in the recent amendment to the Motor Vehicle Information and Cost Savings Act titled the "Motor Vehicle Theft Law Enforcement Act of 1984." Such changes will be based upon the requirements of the "theft protection standard" required to be promulgated by that amendment.

While the Committee may have received some evidence of alleged absence of required modifications, I should point out here that not every non-conformance observed after release of a vehicle is necessarily a safety standard violation. The Vehicle Safety Act does not prohibit a vehicle's owner from modifying the car to take it out of conformance with our standards, and the existence of such vehicles does not, by itself, make the case that a particular modification was not made. It is easy, for example, for an owner to reinsert the European-style headlights that came on his imported car, even if U.S. headlights were installed for certification purposes. This action would be perfectly legal under the Vehicle Safety Act, and an observation of European-style lights would not necessarily mean that a fraudulent certification was provided the Government.

Question. According to an Insurance Information Institute survey, fatalities in auto accidents rose nearly 6% during the first 6 months of 1984, compared to the same period in 1983. For the first quarter of 1984, injuries and auto accidents were also higher. What do NHTSA's statistics show with respect to highway accidents, fatalities, and injuries during 1984?

Answer. From our latest fatality data, compiled from early monthly counts in each State, we estimate that traffic fatalities for the first 8 months of 1984 rose about 2.0% compared to the same period of 1983. Fatalities for the first 6 months rose about 2.5%. Our original report for the first 6 months of 1984, based on more preliminary data, estimated a 5.6% rise as quoted by the Insurance Information Institute. Based on our current data we believe that this initial estimate was too high.

The reason for the discrepancy between the two estimates is that we upgraded our reporting procedure in January 1984, and are still accumulating the full year's data we will need under the new system to calibrate the new estimating model. For the first six months of 1984, there was no basis for modifying the estimating model and therefore we continue to use the old model. Since July the States have had an opportunity to provide updated figures for the first six months. We used these figures to develop an interim model, then revised the earlier estimates.

A comparison of the BAC patterns for drivers since 1980 shows changes indicating definite improvement. Among all drivers with known BAC test results, the proportion with a BAC of .10 or above has declined from 54% in 1980 to 49% in 1983 and to 47% in 1984.

Total vehicle miles of travel has continued to increase in 1984, according to FHWA, and the increase has resulted in the lowering of the fatality rate to the lowest value on record (2.5 fatalities per 100 million vehicle miles of travel).

From our latest Accident Sampling System data we estimated that police-reported accidents rose about 4% in the first 6 months of 1984 compared to the same period in 1983. Though we as yet have no direct data on injuries in these accidents, we project that injuries have risen about 5%. Since accident and injury reporting is more variable than fatality reporting and since we have data for all fatalities but only for a sample of accidents and injuries, we are less confident of our accident and injury estimates than of our fatality estimates.

QUESTIONS OF SENATOR LAUTENBERG AND THE ANSWERS THERETO

Question. On July 11, when you announced your new rule on passive restraints, you also announced that the Department would be undertaking a \$40 million education program with \$20 million coming from the private sector. Your rule states that if two-thirds of the U.S. population is covered by mandatory seatbelt laws, the requirement for passive restraints—airbags and automatic seatbelts—would be rescinded.

How is this education program to be funded? Where will the private funds come from?

Answer. As we announced on July 11, the funds are to come from both the public and private sectors. We anticipate that the private sector will dedicate about \$20 million per year to the program. The Motor Vehicle Manufacturers Association has already established a new non-profit organization, Traffic Safety Now, Inc., to accept and disburse funds from the private sector. I am confident that other private sector groups will also join our efforts to promote safety belt use and belt use laws. As you may know, the Department currently works cooperatively with a wide spec-

trum of private sector organizations, such as the American Automobile Association, PTA, scouting organizations, social and civic groups, the health/medical professions and a variety of corporations. We would hope that those same groups and others would join in a national effort to encourage seat belt use and promote belt use laws. So as not to duplicate private efforts, we plan to establish a close working relationship with the private sector. Public and private sector funds will be expended and accounted for separately.

Question. Where will the Federal contribution come from? Will the Department be seeking additional appropriations or trying to make use of existing funds?

Answer. Our plan is to provide \$20 million per year in Federal funds over four years. For fiscal year 1985, the Continuing Resolution makes \$2.5 million of appropriations available immediately for the new program and clears the way for subsequent reprogramming of an additional \$7.5 million from existing DOT balances after a program plan is reported to the Appropriations Committees and approved for implementation. We are evaluating options for presenting a proposal to the 99th Congress to fund the remaining portion of the \$20 million program goal in fiscal year 1985 and to continue it in fiscal year 1986 and beyond.

Question. What will be the scope of the program? Will it only be used to encourage the use of seatbelts and lay the groundwork for the acceptance of mandatory seatbelt laws? Or, will it be employed to inform the public about the benefits to auto safety devices across-the-board including airbags?

Answer. The nature of this program is to make the traveling public aware of the need to wear safety belts and the wisdom of safety belt use laws. The program is based in part on experience in other nations, such as Great Britain, where public information and educational campaigns preceded the implementation and enforcement of a mandatory belt use law. Factual information about passive restraints will be a part of the program. The need to include this type of information was the subject of a floor colloquy in the Senate during the Continuing Resolution debate as well as in the Conference Report. The American public should know what air bags and other passive restraints are, how they work, their potential benefits and their limitations. They should know that current air bag designs afford adequate crash protection in side impact, rollover and rear-end collisions only when used in conjunction with a lap belt. The major focus of the program, however, will be on the benefits of using the manual lap/shoulder belt systems currently available in close to 100 percent of the nations's passenger vehicle fleet.

Senator DANFORTH. Next we have a panel: Clarence Ditlow, director of the Center for Auto Safety; and Alan Breed, president of Breed Corp.

Mr. Ditlow, please proceed.

STATEMENT OF CLARENCE DITLOW, DIRECTOR, CENTER FOR AUTO SAFETY; AND ALAN BREED, PRESIDENT, BREED CORP.

Mr. DITLOW. I have an abbreviated statement to read.

Outside of Secretary Dole's conditional support of passive restraints, public safety has been seriously jeopardized by the Department of Transportation in the last 3 years. Bumper protection has been slashed by a factor of 4; tire treadwear ratings were repealed; passive restraint installation has been delayed 5 years; increased side impact protection has been shuttled aside; the car book has been axed; and millions of Americans unknowingly ride in defective cars.

I can only address a few of the low points this morning, and I would like to start by going to the bumper protection. I just cannot help but be struck by Administrator Steed when she says that there is the difference between night and day between 5-mile-an-hour bumpers and 2½-mile-an-hour bumpers.

Yet, we are now entering the third model year of 2½-mile-an-hour bumpers and the American public still is not told which cars have which bumpers. There may be a difference between night and day, but what they are concentrating on is whether it is darker at

11:45 p.m. or whether it is darker at 11:50 p.m., when they ought to be concentrating on the difference between midnight and noon, because the consumer cannot tell the difference by looking at the bumper.

I am proud of the fact that we have filed a lawsuit and I hope that resolves the issue and we go back to 5-mile-an-hour bumpers. But in the meantime, NHTSA goes through this protracted rule-making on a rating system while we look at the cars that are on the road, say the 1983 Rabbit with the 2½-mile-an-hour bumper. The increase in frequencies of claims, according to the insurance data, is up 60 percent. The average loss is up 87 percent over 2½-mile-an-hour bumper. What more information do we need?

In the automobile safety defect area, which is a prime concern to the Center because we get 20,000 to 30,000 complaints a year, the number of open public cases is at an all-time low, 31. The average number of recalls over the last 3 years is 184, versus the previous decade's average of 290, and it is not because consumer complaints are down. They are up. They are up at the Center for Auto Safety, they are up at the State of Wisconsin, they are up at DOT, the Federal Trade Commission, and everywhere.

The only thing that is up at NHTSA is secrecy in investigations. They now conduct new secret inquiries, which they did not do prior to fiscal 1980. And these inquiries are available only through the Freedom of Information Act. And the problem is, if the public does not know about defects they cannot take opportunities to protect themselves, they cannot build a case by complaining.

And just one example of that is the tragedy of 16-year-old Donna Sue Thornton of Waverley, TN. When her 1979 Mustang's rear brakes locked up and caused the car to spin out, she and her companion were killed. On the date of that fatal accident Ford Motor Co. was already overdue in responding to NHTSA's request for a recall. Ford finally wrote back and said they were not going to recall and the agency waited a whole year before deciding what to do about the case and then they only upgraded the investigation.

The agency takes years, literally years, to decide to do anything, whether it is rulemaking, whether it is defects. They are paralyzed by a search for perfection, which is not required anywhere in the Motor Vehicle Safety Act. As a matter of fact, when we sued over the revocation of the tire quality grading standards, in one of the sharpest decisions ever issued by the court of appeals in this circuit, Judge Mikva, joined in the decision by Judge Tamm, said:

It is hard to imagine a more sorry performance of a Congressional mandate than that carried out by the NHTSA and its predecessors under Section 203 of the Act. Between inaction, foot-dragging, and field reversal, the track record of agency performance is very muddy indeed. We cannot imagine a more complete clouding of the statutory scheme. And they went on to say that NHTSA was behaving as a compulsive perfectionist, dotting every "i" and crossing every "t" when they did not have to.

The best safety action taken by DOT in the past 3 years is the reinstatement, albeit hesitant and reluctant, of mandatory passive restraints starting with the 1987 model year. But it is tragic that we lost 5 years of passive restraints because of the illegal revocation of the standard by Administrator Peck. The new passive restraint rule may be repealed if two-thirds of the States pass manda-

tory seatbelt laws. Yet there is nothing whatsoever incompatible between passive restraints and mandatory seatbelt laws. A mandatory seatbelt law is the best protection for present cars. Passive restraint protection is the best protection for future cars.

In short, the past 3 years have seen a decline in motor vehicle safety, initiated under former Secretary of Transportation Drew Lewis and continued without significant change under Secretary Dole. The impact of the safety decline has been masked in most part by a major decline in the economy and to a lesser extent by the enactment of child restraint laws, drunk driving laws, and an aging population. But with the strong resurgence in the economy in 1984 and the expected decline in the impact of drunk driving laws, traffic fatalities are rising again. They are up 6 percent in the first half of 1984. And unless we return to improved vehicle safety, particularly for the new small cars, we can expect the traffic toll to continue upward.

The courts and the Congress can only do so much. It is up to Secretary of Transportation Elizabeth Dole to take major strides forward in vehicle safety or else she will be remembered as the Secretary of Transportation who oversaw the sharpest rise in traffic fatalities since the Department was created in 1967.

Thank you.

[The statement follows:]

STATEMENT OF CLARENCE M. DITLOW III, DIRECTOR, CENTER FOR AUTO SAFETY

Mr. Chairman and members of the Subcommittee, thank you for the invitation to testify at this oversight hearing on the National Highway Traffic Safety Administration. The Center for Auto Safety is a non-profit organization founded by Consumers Union and Ralph Nader in 1970 but is now independent of both. The Center has worked primarily on consumer issues pertaining to motor vehicle safety and quality.

Outside of Secretary Dole's hesitant, conditional support of passive restraints, the public's safety has been seriously jeopardized by the Department of Transportation (DOT) in the past three years. Bumper protection has been slashed by a factor of four, tire treadwear ratings were repealed, passive restraint installation has been delayed 5 years, increased side impact protection has been shuttled aside, the Car Book has been axed, and millions of Americans unknowingly ride in defective cars. Given the limited time we have this morning, I can only cover a few of the low points of DOT's lack of commitment to auto safety.

SAFETY DEFECTS—BEHIND CLOSED DOORS, NO ACTION

Today, 18 years after the passage of the National Traffic and Motor Vehicle Safety Act, the recall program at NHTSA is in a shambles. The total number of public cases opened in Fiscal Year 1983 was the lowest figure for an entire year in NHTSA's history. The 31 defect investigations and engineering analyses opened by NHTSA in 1983 was an astonishing 80% drop compared to the third year of the previous administration. Not surprisingly, the number of recalls under NHTSA Administrators Peck and Steed has dropped to record lows, averaging only 184 per year compared to 290 for the previous decade (1971-80) under the 5 previous Secretaries of Transportation. As a direct result of DOT's inaction on defects under Secretaries of Transportation Lewis and Dole, the backlog of dangerous vehicles on America's roadways has risen dramatically. Just looking at the top 8 defects known to DOT today, over 60 million vehicles are involved—literally 1 out of 5 Americans now drives a car with a dangerous defect DOT refuses to recall.

The only thing that is up at NHTSA's defect program today is secrecy. Secret investigations, which did not exist in Fiscal 1980, have skyrocketed since then until fiscal 1983, when 93 such "secret inquiries" were opened, outnumbering public investigations by more than three to one. Citizens who want to know merely if their cars are on NHTSA's investigation list must now file a Freedom of Information Act request, as NHTSA has stamped these lists "classified" and even confiscated fore-

merly public lists investigations from its public reference rooms. (See attached memo from Jerome Holiber, Chief, Technical Reference Division, August 29, 1984).

So it should come as little surprise that on those rare occasions when NHTSA feels compelled to ask the manufacturer to conduct a recall, its requests are scoffed at. In such cases as Chrysler carburetor gaskets and Ford Escort fires, the manufacturers have found that when push comes to shove, NHTSA is a pushover that will back off after just a little private lobbying by the automakers. On at least 10 occasions since 1980, NHTSA has closed or shelved investigations after the manufacturer refused a NHTSA recall request.

NHTSA's inaction leads inevitably to tragedy and death as it did for 16-year-old Donna Sue Thornton and another 16-year-old companion in Waverly, TN, when their 1979 Ford Mustang's rear brakes locked up, causing the car to spin out. On the date of their fatal accident, Ford Motor Company was already weeks overdue to respond to NHTSA's request for a recall on Donna Sue's car. After Ford finally wrote NHTSA refusing to call back the cars, the agency waited more than a year before upgrading its case to a formal investigation. Today no recalls has been ordered.

BUMPER PROTECTION—WHAT YOU DON'T KNOW COSTS

In July 1982, DOT rolled back the most popular vehicle standard ever issued—FMVSS 215 which required no damage to cars or their bumpers in 5 MPH barrier crashes, the equivalent of hitting a parked car at 10 MPH. For those manufacturers which put weaker bumpers on their cars, low speed accident costs soared. For example, the 1983 VW Rabbit with 2½ mph bumpers had a 60 percent increase in insurance claim frequency and an 87 percent increase in average loss payments compared to the 1981 Rabbit with 5 mph bumpers according to the Insurance Institute Highway Safety. The 1983 Honda Accord with 2½ mph bumpers had a 29% and 31% increase in claim frequency and average loss payments respectively over the 1982 Accord with 5 mph bumpers.

Since NHTSA reduced the required bumper protection by a factor of four beginning with 1983 models, the Center has been inundated with thousands of consumer requests for bumper information. Consumers want to know which cars have 5 MPH bumpers and which have 2½ MPH bumpers. The problem is they can't tell by looking at the car.

Although NHTSA promised to publish bumper ratings when it repealed the 5 MPH bumper standard in July 1982, it has failed to do so. As a result consumers in the past two years buying cars like Honda's with poor 2½ MPH bumpers are not only being hit with more property damage on their cars but also higher insurance rates.

When NHTSA failed to publish its promised bumper ratings, the Center wrote to all the domestic and foreign auto manufactureres to ask whether they had kept 5 MPH bumpers and then published our own ratings. With the exception of General Motors and Chrysler, all the companies provided information. For those two companies, we obtained information from NHTSA. (A copy of our ratings for the 1983 and 1984 model years are submitted for the record.)

NHTSA's weak excuse for failing to even issue bumper ratings is that it wanted to develop a new test procedure for rating. This is patently ridiculous since NHTSA already has a good test procedure and rating system—the one it used for 5 years to determine compliance with the revoked 5 MPH bumper standard.

TREADWEAR RATINGS—TIRED OLD EXCUSE FOR INACTION

Beginning in 1979, NHTSA published tire treadwear ratings that helped consumers make better selections from the thousands of tires on the market. In 1982, former NHTSA Administrator Raymond Peck indefinitely suspended the treadwear rating alleging the ratings were inaccurate and could mislead consumers.

When the Center for Auto Safety and Public Citizen challenged the "suspension" in a lawsuit, the U.S. Court of Appeals for the District of Columbia firmly rejected Peck's specious argument in noting that much of the variation in ratings was due to deliberate undergrading by some tire companies and this variation could be eliminated by requiring uniform reporting of treadwear ratings. The remaining variability could be reduced by correcting known sources of error such as wheel alignment, vehicle loads, tread depth probes, and scales. Rather than throwing out the treadwear ratings as NHTSA did, the Court found the agency should have moved to correct the sources of the error while continuing to provide information to the tire-buying public.

In strong rebuke of the NHTSA, Judge Abner Mikva in a decision joined by Judge Tamm said:

"It is hard to imagine a more sorry performance of a congressional mandate than that carried out by NHTSA and its predecessors under section 203 of the Act. Between inaction, foot-dragging, and field reversal, the track record of agency performance is very muddy indeed. . . . We cannot imagine a more complete flouting of the statutory scheme."

Even after losing this Court case on treadwear ratings, NHTSA continues to stall and delay reinstituting treadwear ratings on similar grounds to those already rejected by the Court. Thus NHTSA has begun a new rulemaking to delay reinstituting treadwear ratings until 1986 for radial tires on the grounds its test tires will cause errors in ratings and new tires must first be procured.

PASSIVE RESTRAINT—STILL FURTHER IN THE FUTURE

The best safety action taken by DOT in the past three years is the reinstatement, albeit it hesitant and reluctant, of mandatory passive restraints starting with the 1987 model year. It is tragic that we lost 5 years of passive restraints due to the illegal revocation by former Administrator Peck which was overturned by a unanimous Supreme Court. However, the new passive restraint rule will be rescinded if the legislatures in states representing at least two-thirds of the U.S. population pass laws requiring the use of existing seat belt systems. Although only one state, New York, has such a law to date, it is expected that other states will follow suit.

The irony of Secretary Dole's decision is that the occupant passive protection rule will be starting to show effects in reducing injuries and preventing deaths at a time when the requirement for passive restraints could be rescinded. In reaching this decision, Secretary Dole stated two objectives in promulgating the rule: to "protect the most people now, using existing resources" and to "provide leadership for the future, encouraging the technology that could provide even greater safety in the years ahead." But by allowing the automatic protection provisions to die in favor of mandatory seat belt use laws, Secretary Dole has given manufacturers an even stronger incentive to assure that laws favoring use of an inferior restraint system are passed.

There is nothing incompatible about passive restraints and mandatory seat belt laws such that one should be played off against the other. Rather mandatory seat belt laws offer the best occupant protection for present cars while passive restraints offer the best protection for future cars. Given their greater energy absorbing area, air bags are particularly good for the new small cars of the 1980's which need even more occupant protection than present seat belts provide.

Even if the passive restraint requirement is maintained, relaxing amendments threaten to undermine it. Thus NHTSA has already granted GM's petition to initiate rulemaking to permit substitution of the Hybrid III test dummy for the present Part 572 dummy. The problem with this is that in high speed crashes, the Hybrid III dummy records lower injury levels than the present dummy. In other words, a failing 1100 HIC level with the Part 572 dummy could be translated into a passing 900 HIC level with substitution of the Hybrid III dummy. The bottomline is that cars with "friendly interiors," i.e., no restraints, could pass a 208 weakened by adoption of Hybrid III when it could not pass muster under present FMVSS 208.

To prevent such weakening of the injury protection levels of FMVSS 208, the injury criteria would have to be made more stringent. Moreover, as soon as the Center petitioned NHTSA to tighten the injury criteria for FMVSS 208 on September 10, 1984, the agency denied the petition on September 11. Given the importance of this issue and the fact NHTSA could have scarcely given our petition any substantive review in one day, we have asked for reconsideration and will seek judicial review if it is again denied in such a hasty fashion.

CONCLUSION

The past 3 years has seen a decline in motor vehicle safety initiated under former Secretary of Transportation Drew Lewis and continued without significant change under Secretary Elizabeth Dole. The impact of the safety decline has been masked for the most part by a major decline in the economy and to a lesser extent by enactment of child restraint laws, an aging population which drives safer, and the initial salutary effect of drunk driving laws. But with the strong resurgence in the economy in 1984 and the expected decline in the impact of drunk driving laws, traffic fatalities are rising again—up almost 6 percent for the first half of 1984. Unless we return to improved vehicle safety, particularly for the new small cars, we can expect the traffic toll to continue upward. While the Courts and Congress have

slowed the vehicle safety decline, it's up to Secretary of Transportation Dole to take major strides forward in vehicle safety or else she will be remembered as the Transportation Secretary who oversaw the sharpest rise in traffic fatalities since the Transportation Department was created in 1967.

[The following information was subsequently received for the record:]

QUESTIONS OF SENATOR DANFORTH AND THE ANSWERS THERETO

Question. In your view, was there any rational reason for NHTSA to roll back the bumper standard? Do you think the marketplace will be able to take care of this problem or must NHTSA reinstate the 5 mph standard in order for consumers to have better bumper protection?

Answer. There was no rational reason for the NHTSA to roll back the 5 mph bumper standard which was supported by over 90% of the American public, saved hundreds of dollars in individual accident costs, added no more than \$30 to the price of cars, and improved automobile safety by reducing vehicle accidents.

The marketplace is unable to take care of this problem as fully half the cars sold in 1983-84 have reduced bumper protection below 5 MPH. Even those vehicles which have retained 5 MPH bumpers no longer offer the full 5 MPH protection of the rolled back standard—they no longer meet the Phase II requirement that there be no damage to the bumper itself in 5 MPH crashes.

Question. Do you believe that enough is known for NHTSA to quickly issue a standard which would upgrade the current side impact protection standard?

Answer. NHTSA could upgrade the current side impact standard immediately by requiring all cars to withstand the same force rather than let lighter cars have reduced side impact forces applied in testing. Indeed, a more sophisticated standard using a moving barrier could also be issued but no one could find any technical reason to at least upgrade the force levels for the present static test for small cars.

Question. In your view, what action should NHTSA take to ensure that consumers can easily obtain information as to the safety aspects of various automobiles?

Answer. NHTSA should resume publication of the *Car Book* to convey complete information on vehicle safety to as many consumers as possible. In addition, all new cars should be required to have window stickers showing the results of crash tests done in the form of NHTSA's New Car Assessment Program.

Senator DANFORTH. Let me ask you, Mr. Ditlow, do you think it is important for the Department of Transportation to factor in the effect of a 2½-mile-an-hour bumper on cars that are not involved in accidents in their study?

Mr. DITLOW. Whether they factor it in or not, the conclusions are the same: The 5-mile-an-hour bumper is better. No, to the public out there, they do not care whether the 2½-mile-an-hour bumper—

Senator DANFORTH. Have you ever heard of factoring in cars that are not involved in accidents in studying the effect of bumpers or anything else on accidents?

Mr. DITLOW. Not until this cost-benefit analysis done for the bumper ruling. They have never done it before and I do not think it should be done.

Senator DANFORTH. What is the reason for it?

Mr. DITLOW. The reason they say is they look at the statutory language, contort it, and say we have to factor in whether or not there are any accidents at 2½. I do not agree with it. I think it is irrational, and that is one of the things that we are challenging in our court case.

I think that when you get right down to it—

Senator DANFORTH. I mean, it is silly on its face, is it not?

Mr. DITLOW. It is silly on its face, and the reason why we think they are doing it is it is the only way they can justify 2½. It is a false argument that they bring in. It is a red herring which should

not be brought in, and it is the only way they can try to weight away from 5-mile-an-hour bumpers.

Obviously the 5-mile-an-hour bumper cannot work if there is no accident and the 2½-mile-an-hour bumper does not work if there is an accident. So you would look to see what happens when there is an accident, and in that instance the 5-mile-an-hour is clearly demonstrably better than the 2½.

Senator DANFORTH. Do you know of any precedent in safety laws for factoring in the effects of people who do not have accidents? I mean, I think that there are rules requiring people who clean windows to use certain safety harnesses. It would seem to me to be silly if we had to have a prolonged study of the effect of safety harnesses on people who do not clean windows.

Mr. DITLOW. I think you are exactly right, Senator Danforth.

Senator DANFORTH. Mr. Breed.

Mr. BREED. Mr. Chairman and members of the subcommittee, thank you for this opportunity to provide the subcommittee with a status report on the Breed compact airbag, a self-contained, all mechanical airbag system. Thank you, Mr. Chairman, for your continuing interest in and encouragement of automobile airbags.

We have made outstanding progress in our test evaluation and preliminary marketing efforts involving the Breed compact airbag. New Jersey's Senator Frank Lautenberg, a distinguished member of this committee, recently visited our plant in Lincoln Park, NJ, and was able to see the progress first hand.

In summary, here is the current status of the Breed airbag program. First of all, under a demonstration program contracted with us by the National Highway Traffic Safety Administration, three full-scale crash tests of the system have been completed. In each test the system performed at levels that met or substantially exceeded the Department of Transportation's criteria for airbag performance under FMVSS 208.

I will show a film of one of such crash tests in a moment.

Second, we have briefed auto manufacturers around the world on the Breed compact airbag's design, performance, low cost, and projected availability for volume production. We are in continuing discussions with a number of manufacturers who are interested in this system and have already tested the Breed all-mechanical sensor which is the heart of our compact airbag in their own crash test programs.

Third, we have developed timetables and funding projections for moving the Breed compact airbag into volume production and availability. We estimate a retail cost of about \$50 for a driver-side unit when we reach full production, compared to a retail price of \$880 for a system now being offered by Mercedes Benz.

Next a word about our system. Unlike conventional airbag systems which depend on extensive and relatively costly connections with the car's electronics, our compact airbag system is entirely self-contained that is, the sensor is actually located within the gas generator. Since it is completely mechanical, the compact airbag needs no wiring into the car's electrical network and is in no way dependent on it.

Here is a demonstration model of the mechanical sensor constructed four times larger than an actual sensor. If I may, I will show you this.

This is a cutaway of our module contained in the steering wheel itself. Here is our sensing site here within the gas generator. It is a dual sensor and redundant. Either side is adequate to take the airbag off, so this is strictly done for reliability, a standard technique for getting higher reliability. There are two balls in here in tubes. The balls move forward in a crash. The sensor goes in this direction.

When the ball moves this lever about 20 degrees, a firing pin is released and moves into a chamber which actuates the sodium oxide and inflates the bag.

Now, this is an actual unit of a recent NHTSA crash. This would be the complete airbag module. This is the Breed sensor and this gas generator was used in one of the NHTSA tests and was cleaned up afterward. You can see the whole unit in there.

On March 5, 1984, we entered into a contract with NHTSA to fully demonstrate the Breed compact airbag and to validate its components for a driver-side system with the injury-prevention criteria of FMVSS 208. Our first test was the head-on barrier crash at 30 miles per hour on June 26. The driver-side Breed compact airbag prototype was installed in a 1979 Ford LTD. The system employed a Breed all-mechanical sensor initiator in a production-type Talley gas generator complete with fabric bag, metal attachment plates, installed in a Ford Tempo Topaz production model steering wheel made by Sheller-Globe.

I might mention that the Ford Motor Co. has been specifically and especially helpful in this test series by allowing Talley and Sheller-Globe, its suppliers, to make these parts available to us, from Ford tooling, on a timely and economical basis.

In addition to the Breed compact airbag, we design, manufacture, and equip the car with knee bolsters to reduce the likelihood of an unbelted occupant submarining under the airbag and steering wheel during the crash.

As specified in the NHTSA contract, the driver-side instrumented test dummy used to measure the forces during the crash was unbelted. Results of the first test were excellent. The Breed compact airbag measured levels of protection against—Senator, shall I go on?

Senator DANFORTH. Oh, yes.

Mr. BREED. The Breed compact airbag measured levels of protection against head injury that were 75 percent better than the criteria specified in FMVSS 208. Impressive results were also achieved in the areas of chest and femur injury reduction.

The second test, head on into a barrier, was conducted at 12 miles per hour on July 26. Conditions, make, and model of car, unbelted driver, airbag design, knee bolsters were otherwise identical to the first test, and again the results were excellent.

We performed a third test on August 8. In a moment you will see a film of this test, but first let me describe it. A 1980 Ford LTD, equipped with a Breed compact airbag, was crashed at 30 miles per hour head on at its center line into an unyielding steel pole. This is a particularly demanding test for an occupant-restraint system,

since it concentrates the force of the crash against a relatively small area of the car's front and can very rapidly cause injuries to the occupants.

The airbag sensor must detect the rapid and violent forces quickly enough to initiate airbag deployment in time to cushion the driver from what would otherwise be devastating injuries from striking the windshield, steering wheel, dashboard, or from ejection through the windshield.

The results were the best we have seen to date. For instance, the Breed compact airbag exceeded the NHTSA head-injury-protection criteria by more than 80 percent. I do have a film of that test.

[Film shown.]

Mr. BREED. The first shot we will see here will just be a normal speed overall picture. This is looking out from where—here comes the car at its normal speed at 30 miles per hour into the pole. Here comes an overhead shot which is in slow motion. You will see the car coming in. There it comes now. You can see it hit the bumper and you can see what a tremendous crash this is.

Now, this is followed by a couple of shots inside, showing the actual deployment of the bag and the cushioning of the dummy. This type of crash, what makes it so difficult is that you get very little retarding of the vehicle as the bumper—in the early stages of the crash, until all of a sudden the pole bumps into some solid structural member or the engine, at which time you just get a tremendous rise in the deceleration.

Here is inside the car. The first strobe, there is the hitting of the pole, out comes the whole system. The HIC's on this was almost unbelievable, only 187, very, very low in comparison to the 1,000 criteria. That is glass flying around from one of the rear windows, I believe.

The chest G's on this crash, I believe, were 43. The femur loads, just over 1,300. This is out of a 60 G criteria, and the femur load was 1,350 and 1,310. Here again, a different angle. Here comes the bag.

This is totally self-contained now. There are no sensors up front. There are no electrical connections. It is all operated by the self-contained unit. There is one more shot that we will see here that shows from the side of the car, it gives you another idea of how far the pole penetrates into the vehicle. And we will cut it short.

This is also in slow motion. You can see the bag coming up if you look at the dummy. Very, very vigorous crash.

OK, I think we can cut the movie.

In addition to the higher speed crash test just described, the Breed compact airbag has been subjected to tests under low speed impact, rough road, and sudden braking conditions as part of the NHTSA contract program. These are conditions under which airbags are meant not to deploy, and in all of these tests the Breed compact airbag has not triggered, the so-called inadvertent-type tests.

Under the NHTSA contract program, there remain 8 more full-scale crashes of the Breed compact airbag, plus some 50 sled tests. On completion of the test work next year, we will retrofit the Breed compact airbag driver-side units into 100 State police fleet automobiles.

We work with the auto manufacturers. Earlier this year, we carried out a series of introductory briefings on the Breed compact airbags for auto manufacturers here and abroad. We met with engineering personnel from virtually every manufacturer selling cars in the United States. These briefings have resulted in continuing discussions with individual companies that have expressed interest in our system. A number have purchased versions of the all-mechanical sensor used in our system, modified so that they could measure how readily the sensor would activate the airbag inflator in a crash of any given automobile, were it actually equipped with a complete Breed compact airbag.

More than 50 such tests of our all-mechanical sensor have been conducted by various manufacturers. In each, it performed as intended.

Several manufacturers have also subjected our all-mechanical sensor to rough road handling tests and tests to simulate rough handling endured in automobiles being shipped by railroad. We understand that there have been no inadvertent triggerings during any of these tests.

OK. What are some of our needs as we see the picture now? In order to prepare the Breed compact airbag for full driver-side production and installation, we estimate the need for a 12-month program costing \$5 million. Under such a program, 10,000 driver-side units could be produced and installed. This equates to roughly \$500 per vehicle.

For the passenger side, a 12-month effort, costing approximately \$10 million, would allow placement of 10,000 units on the passenger side in automobiles. Upon completion of the program for the driver-side system, we would have volume tooling in place that would bring the retail cost of the driver-side Breed compact airbag to about \$200 per unit. Cost for the passenger side would be comparable under the same circumstances.

At production of 1 million units, retail costs of the driver side would drop to \$50, and the passenger-side unit to about \$100.

Senator DANFORTH. What is that again? \$50 for the driver side?

Mr. BREED. No; \$50 for the driver side when we get into production at the rate of about 1 million a year or more. And the passenger side would go to about \$100 per unit at, again, production rates of 1 million or more per year.

Senator DANFORTH. For a total of \$150.

Mr. BREED. Right.

Breed Corp., a private company will continue its current modest development program for the Breed compact airbag within the limits of our present resources. However, our work would be substantially speeded and the advent of low-cost, mass-produced airbags greatly hastened by Government support for the funding and timetables I have described above.

Breed will be better able to quickly meet Secretary Dole's call for a low-cost, very reliable airbag if we can obtain support for our current program, whether through the U.S. Department of Transportation's current restraint-support programs, through additional purchases of airbags by the General Services Administration, or other agencies such as the Department of Defense, and the Veter-

ans' Administration, or through new authority and funding enacted by Congress.

In conclusion, I would like to draw attention to Secretary Dole's expressed interest in, first of all, providing incentives for manufacturers to comply with FMVSS 208 by installing airbags rather than automatic seatbelts in their new cars. That incentive is expressed in the standard by a formula to permit manufacturers to make fewer FMVSS 208 cars if they choose airbags or passive interiors rather than automatic belts.

And, second, in her expanding airbag availability through retrofit, the FMVSS 208 decision says—and I quote: "Requiring an airbag retrofit capability (in new cars) would make it easier for owners of automobiles to have airbags installed in their cars in the 'after-market.' It would also allow purchase of an airbag by a second or third owner, if the original owner failed to purchase one. This would be especially valuable if systems like Breed's airbag eventually proved successful."

We suggest that the Secretary could usefully couple these two concepts by offering an incentive—such as a fewer car formula for airbag cars—to manufacturers providing retrofit capability for airbags in new cars. There appears to be no reason why the Department could not do this as a simple amendment or clarification of its existing order in FMVSS without disturbing other elements of the order.

And no manufacturer would be required to make use of the formula if it preferred not to do so.

The cost of thus providing retrofit-capable new cars would be relatively small to manufacturers, but would give a tremendous boost to the development of a market for low-cost, highly reliable, mass-produced retrofit airbags. It would be up to the retrofit airbag companies themselves, of course, to nurture and serve that market.

I can assure you that Breed Corp., as one such company, is ready and eager to do so. I would be pleased to answer any questions at this time.

[The statement follows:]

STATEMENT OF ALAN BREED, CHAIRMAN, BREED CORP.

Mr. Chairman, members of the subcommittee, thank you for this opportunity to provide the Subcommittee with a status report on the Breed Compact Airbag—a self-contained, all-mechanical airbag system which we first described for you at the hearing of March 10, 1983. And allow me to thank you, Mr. Chairman, for your continuing interest in, and encouragement of, automobile airbags.

As I will discuss in detail, we have made outstanding progress in our test, evaluation and preliminary marketing efforts involving the Breed Compact Airbag. New Jersey's Senator Frank Lautenberg, a distinguished member of this Committee, recently visited our plant in Lincoln Park, New Jersey, and was able to see that progress first-hand. Senator Lautenberg's advice, interest and encouragement have been deeply appreciated by our management and staff.

In summary, here is the current status of the Breed Compact Airbag program:

(1) Under a demonstration program contracted with us by the National Highway Traffic Safety Administration, three full-scale crash tests of the system have been completed. In each test, the system performed at levels that met or substantially exceeded the Department of Transportation's criteria for airbag performance under FMVSS 208. I will show a film of one such crash test in a moment.

(2) We have briefed auto manufacturers around the world on the Breed Compact Airbag's design, performance, low cost, and projected availability for volume production. We are in continuing discussions with a number of manufacturers who are interested in the system, and many have already tested the Breed All-Mechanical

Sensor, which is the heart of our Compact Airbag, in their own crash test programs. We also are continuing to supply client manufacturers with the Breed electric sensor we developed some years ago for use in conventional airbag designs.

(3) We have developed timetables and funding projections for moving the Breed Compact Airbag into volume production and availability in accordance with the clear intent of Secretary Dole's decision of July 11.

"Most important," the decision stated, "The Department believes that this rule will result in the use of airbags in a far larger number of automobiles than is the case today." And, "It should be noted that improvements are possible in the airbag system that might overcome some of the remaining problems. For example, the airbag system being developed by Breed might make airbags available at less cost than current airbag systems."

We estimate a retail cost of about \$50 for a driverside unit when we reach full production, compared to a retail price of \$880 for a system now being offered by Mercedes-Benz.

THE BREED SYSTEM

First, let me offer a brief description of the Breed Compact Airbag:

Unlike conventional airbag design, which depend on extensive and relatively costly connections with the car's electronics, our Compact Airbag system is entirely self-contained. Since it is completely mechanical, the Compact Airbag needs no wiring into the car's electrical network, and is in no way dependent on it. Here is a demonstration model of the mechanical sensor, constructed four times larger than an actual sensor. (Attachment 'A' is a photo of the model.) And this is a cutaway steering wheel, containing a mockup of the Breed Compact Airbag—entirely self-contained in a space of less than one cubic foot, lighter weight than conventional airbag systems, and less difficult to replace than a headlight. (Attachment 'B' is a photo of the wheel.)

A detailed diagram of our Compact Airbag design and its operating principles is attached. (Attachment 'C'.)

BREED NHTSA PROGRAM

On March 5, 1984 we entered into a contract with NHTSA to fully demonstrate the Breed Compact Airbag and to validate its compliance as a driver-side system with the injury-prevention criteria of FMVSS 208. As a result of very encouraging performances for our mechanical sensor reported by numerous auto manufacturers testing it, Breed and NHTSA agreed to speed up the schedule for crash testing of complete prototype Breed Compact Airbag units.

Our first such test was a head-on barrier crash at 30 mph on June 26. The driver-side Breed Compact Airbag prototype was installed in a 1979 Ford LTD. The system employed a Breed All-Mechanical Sensor/initiator in a production-type Tarrey gas generator, complete with fabric bag and metal attachment plates, installed in a Ford Topaz-Tempo production-model steering wheel made by Sheller-Globe. (Ford Motor Company has been specially helpful to this test series by allowing Talley and Sheller-Globe, its suppliers, to make these parts available to us on a timely and economical basis.)

In addition to the Breed Compact Airbag, we designed, manufactured and equipped the car with knee bolsters to reduce the likelihood of the unbelted occupant "submarining" under the airbag and steering wheel during the crash.

As specified in the NHTSA contract, the driver-side instrumented test dummy, used to measure forces during the crash, was unbelted.

The results of that first test were excellent. (See Attachment 'D' for test-by-test results.) The Breed Compact Airbag measured levels of protection against head injury that were 75 percent better than the criteria specified in FMVSS 208. Impressive results also were achieved in the areas of chest and femur injury reduction.

The second test head-on into a barrier was conducted at 12 mph on July 26. Conditions—make and model of car, unbelted driver, airbag design, knee bolsters—were otherwise identical to the first test. Again, results were excellent.

We performed a third test on August 8. In a moment you will see a film of that test, but first let me describe it. A 1980 Ford LTD, equipped with a Breed Compact Airbag, was crashed at 30 mph head-on at its center line into an unyielding steel pole. This is a particularly demanding test for an occupant restraint system, since it concentrates the force of the crash against a relatively small area of the car's front and can very rapidly cause injuries to the occupants. The airbag's sensor must detect the rapid and violent forces quickly enough to initiate airbag deployment in time to cushion the driver from what would otherwise be devastating injury from

striking the windshield, steering wheel or dashboard, or from ejection through the windshield.

The results were the best we've seen to date. For instance, the Breed Compact Airbag exceeded the NHTSA head injury protection criteria by more than 80 percent.

Here is a film of that test in slow motion.

We are providing the Subcommittee with a videotape copy of this film for inclusion into the record of the hearing.

In addition to the higher-speed crash tests just described, the Breed Compact Airbag has been subjected to tests under low-speed impact, rough road, and sudden braking conditions as part of the NHTSA contract program. There are conditions under which airbags are meant not to deploy; and in all of these tests, the Breed Compact Airbag has not triggered.

Under the NHTSA contract program there remain eight more full-scale crash tests of the Breed Compact Airbag, plus some 50 sled tests. On completion of the test work next year, we will retrofit Breed Compact Airbag driver-side units into 110 state police fleet automobiles. (The candidate models are Ford LTDs and Chevrolet Impalas.) This will complete our present contractual commitment to NHTSA.

AUTO MANUFACTURERS

Earlier this year we carried out a series of introductory briefings on the Breed Compact Airbag for auto manufacturers here and abroad. We met with engineering personnel from virtually every major manufacturer selling cars in the United States market. We have followed up these exchanges by providing the car companies with continuing information about our NHTSA contract program.

Those briefings have resulted in continuing discussions with individual companies that have expressed interest in our system. A number have purchased versions of the All-Mechanical Sensor used in our system, modified so that they could measure how rapidly the sensor would activate the airbag inflator in a crash of any given automobile model. Were it actually equipped with a complete Breed Compact Airbag. More than 50 such tests of our All-Mechanical Sensor have been conducted by various manufacturers; in each, it performed as intended. Several manufacturers have also subjected our All-Mechanical Sensor to rough road handling tests, and tests to simulate the rugged handling endured in automobiles' shipment by railroad. We understand that there have been no inadvertent triggerings during any of those tests. In addition, our program development is continuing with interested companies here and abroad.

TIMETABLE OF NEEDS

In order to prepare the Breed Compact Airbag for full driver-side production and installation, we estimate the need for a 12-month program costing \$5 million. Under such a program, 10,000 driver-side units could be produced and installed. For the passenger side, a 12-month effort costing \$10 million would allow placement of 10,000 units in automobiles.

Upon completion of a program for the driver-side system, we would have volume tooling in place that would bring the retail cost of the driver-side Breed Compact Airbag to about \$200 per unit. Costs for passenger-side units would be comparable under the same circumstances. At production of 1 million units, retail cost of the driver-side system would drop to \$50, and the passenger-side unit to about \$100.

Breed, a private company, will continue its current, modest development program for the Breed Compact Airbag within the limits of our present resources. However, our work would be substantially speeded, and the advent of low-cost, mass-produced airbags greatly hastened, by government support for the funding and timetables I have described above. Breed will be better able to quickly meet Secretary Dole's call for a low-cost, very reliable airbag if we can obtain support for our current program—whether through the U.S. Department of Transportation's current restraint support programs; through additional purchases of airbags by the General Services Administration or other agencies such as the Department of Defense and the Veterans Administration; or through new authority and funding enacted by Congress.

In conclusion, I would like to draw attention to Secretary Dole's expressed interest in:

(1) Providing incentives for manufacturers to comply with FMVSS 208 by installing airbags rather than automatic seat belts in their new cars. That incentive is expressed in the standard's formula to permit manufacturers to make fewer FMVSS 208 cars if they choose airbag (or passive interiors) rather than automatic belts.

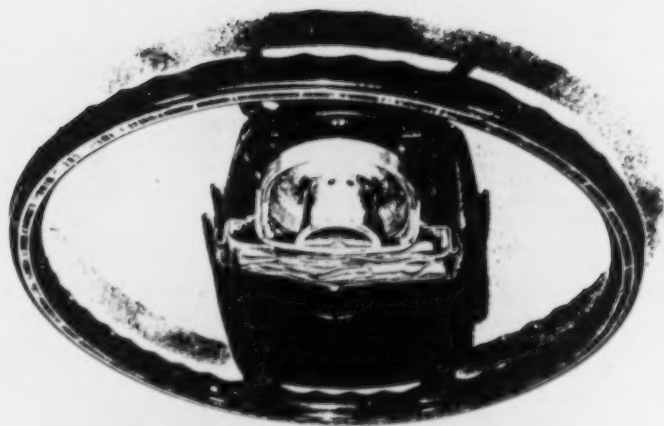
(2) Expanding airbag availability through retrofit. The FMVSS 208 decision says, "Requiring an airbag retrofit capability (in new cars) would make it easier for owners of automobiles to have airbags installed in their cars in the 'aftermarket.' It would also allow purchase of an airbag by a second or third owner, if the original owner failed to purchase one. This would be especially valuable if systems like Breed's airbag eventually proved successful."

We suggest that the Secretary could usefully couple these two concepts, by offering an incentive—such as a "fewer car" formula for airbag cars—to manufacturers providing retrofit capability for airbags in new cars. There appears to be no reason why the Department could not do this as a simple amendment or clarification of its existing order in FMVSS, without disturbing other elements of the order. And, no manufacturer would be required to make use of the formula if it preferred not to do so.

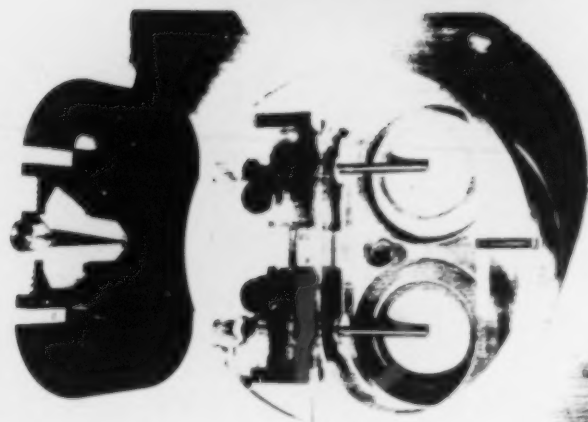
The costs of thus providing retrofit-capable new cars would be relatively small to manufacturers, but would give a tremendous boost to the development of a market for low-cost, highly reliable, mass-produced retrofit airbags.

It would be up to the retrofit airbag companies themselves, of course, to nurture and serve that market. I can assure you that Breed Corporation, as one such company, is ready and eager to do so.

I would be pleased to answer any questions at this time.



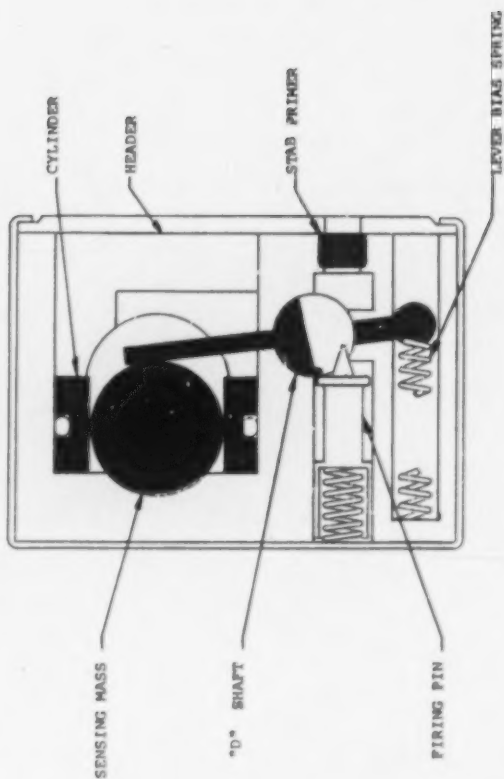
ATTACHMENT "B"



ATTACHMENT "A"

26 1/2"

BREED AIR BAG CRASH SENSOR/INITIATOR



ATTACHMENT 'C'

- o IN NORMAL DRIVING THE SENSING MASS OR BALL IS HELD IN THE POSITION SHOWN BY THE SPRING LOADED LEVER.
- o A DECELERATION OF MORE THAN 4 "Gs" IS REQUIRED TO OVERCOME THE SPRING LOADED LEVER BIAS AND CAUSE THE SENSING BALL TO MOVE FORWARD. (THE MAXIMUM DECELERATION ATTAINABLE BY THE VEHICLE BRAKING IS LESS THAN 1 "G").
- o ONCE IN A CRASH WITH GREATER THAN A 4 "G" DECELERATION, THE MOTION OF THE BALL IS DAMPED OR SLOWED BY GAS FLOW THROUGH THE BALL-CYLINDER CLEARANCE.
- o IF A VEHICLE DECELERATES LONG ENOUGH ABOVE 4 "Gs", THE FORWARD MOVEMENT OF THE BALL WILL CAUSE THE SPRING LOADED LEVER TO TURN THE "D" SHAFT SUFFICIENTLY TO RELEASE THE FIRING PIN.

THE BREED AIRBAG MODULE

The all mechanical driver side Breed Airbag Module was successfully crash tested in a full-up, instrumented dummy crash test of a 1979 Ford Crown Victoria LTD on June 26, 1984. The Breed all-mechanical sensor/initiator fired at approximately 32 milliseconds during a 30 mph frontal barrier crash. The unbelted dummy readings were:

HIC's.....	247
Chest G's.....	44
Left femur load.....	1,450
Right femur load.....	1,820

This test was conducted under Breed Corporation's current DOT/NHTSA demonstration contract.

The all-mechanical driver side Breed Airbag Module was successfully crash tested in a full-up, instrumented dummy crash test of a 1979 Ford LTD on July 26, 1984. The Breed all-mechanical sensor/initiator fired at approximately 46 milliseconds during a 12 mph frontal barrier crash. The unbelted dummy readings were:

HIC.....	25
Chest G's.....	20
Left femur load.....	1,100
Right femur load.....	1,015

This test was conducted under Breed Corporation's current DOT/NHTSA demonstration contract.

FORD LTD 30 MPH CENTERLINE POLE CRASH

The all-mechanical driver side Breed Airbag System was successfully crash tested in a full-up, instrumented dummy crash test of a 1980 Ford LTD on August 8, 1984. The Breed all-mechanical sensor/initiator fired at approximately 25 milliseconds during a 30 mph centerline pole crash. Preliminary data analysis indicates the unbelted dummy readings were:

HIC.....	187
Chest G's.....	43
Left femur load.....	1,350
Right femur load.....	1,310

The test was conducted using a bumper with a reinforced middle section. The results indicate that with a relatively easy bumper modification, a centerline pole crash can be managed as readily as a frontal barrier crash.

This test was conducted under Breed Corporation's current DOT/NHTSA demonstration contract.

[The following information was subsequently received for the record:]

QUESTIONS OF SENATOR LAUTENBERG AND THE ANSWERS THERETO

Question. Given the promise of your system, I am interested in knowing how far away you are from production. When can the public expect to be able to purchase a Breed airbag?

Answer. Senator Lautenberg, we estimate that we could standardize our driver side all-mechanical Breed Airbag Module for about \$5,000,000 over a one-year period. This would result in the installation of 10,000 driver side Breed airbags. A passenger side standardization would cost about \$10,000,000, would also last about 12 months, and result in the installation of 10,000 passenger side Breed airbags.

At the end of the standardizing effort, we would have tooling in place to produce about 10,000 Breed Airbag Modules per month. We would then expect to sell a driver side unit for about \$200.00 and a passenger side unit for about \$400.00.

To create tooling for mass-production of Breed Airbag Modules would cost an estimated \$6,000,000 for the driver side and \$12,000,000 for the passenger side, an effort requiring about 8 months. We would then expect to sell a driver side Breed Airbag Module for \$32.00 and a passenger side unit for \$64.00.

Question. There has been a great concern voiced by opponents of airbags as regards their cost. Your system is reported to be able to cut the cost of airbags by at least half. Where do you stand today on the cost of your system? What factors are likely to influence that cost over time?

Answer. Our system cost is indicated in the answer to Question No. 1. How can we do it? Simplification. Our all-mechanical compact Breed Airbag Module eliminates the need for multiple sensors in the front of the automobile; brackets; wiring back to the gas generator; slip rings; electric squibs; auxiliary power supplies and electronic diagnostic systems; and the costs of buying and installing these components. The cost of airbag systems reflects the number of units produced. The more units produced, the less expensive airbags should be to the consumer. At a volume of 1,000,000 Breed Airbag Modules per year, we would expect our selling costs to be \$32.00 each for a driver side unit and \$64.00 for a passenger side unit.

At this time, it is not clear whether automobile manufacturers will buy complete airbag systems or only their components. If the auto manufacturers require product liability insurance coverage from suppliers of airbag systems, the premiums therefor will be an added cost. It appears that product liability insurance carriers prefer to insure the entire automobile rather than component parts such as airbag systems. Under our NHTSA airbag demonstration program, we have a quote of \$15.00 per vehicle for required product liability insurance coverage.

Senator DANFORTH. Thank you, sir. Very impressive. The dummy would have lived?

Mr. BREED. Yes; that dummy would have really lived—187 HIC is a very, very low value for any kind of a 30-mile-an-hour crash. And heretofore, pole crashes have always been the most difficult to get.

I should mention that in studying our data, in prior pole crashes, we did stiffen that bumper slightly in the front to give a little more of a pulse in the early portion of the crash, to get the sensor sensing, so that the bag was pretty well operating when it went in there. But some, not all, cars appear to need that stiffening. Maybe the 5-mile-an-hour bumper would do it. I don't know. But it needs a little more stiffness than is typically found in some cars, right in the middle.

Senator DANFORTH. Does this device work equally well with, say, a 30° angle as it does with a front-on crash?

Mr. BREED. Yes. We have as yet not fully tested the device in a 30° angle. I should mention this airbag work has been part of our activity for the last 16 years. We have done a great deal of analysis for all the car companies under contract. So we have an internal crash library of computer tapes of all—of about 500 crashes at least, which is probably more extensive because it goes across the board with all manufacturers.

Senator DANFORTH. In other words, you don't need the sensors. This device, you believe, would work on the 30° angle?

Mr. BREED. That is a sensor, and the sensor is very effective at 30° in all crashes in which the airbag would be helpful.

Senator DANFORTH. So there would be no reason to have the bumper sensors. It could all be done mechanically.

Mr. BREED. That is right.

I might add that we are producing all the sensors that are on the Ford program. We are a Ford supplier, and that is our system.

Senator DANFORTH. That is the mechanical, not the bumper-type sensor?

Mr. BREED. No. The Ford Tempo program uses a conventional electrical airbag system which is the only system they could have used because it was the only one ready for production when this bid came out. We are Ford's manufacturer-supplier of all of those sensors for that system, the bumper sensors.

Senator DANFORTH. But what I am saying is, this is another approach. This is a newer approach; correct?

Mr. BREED. That is correct.

Senator DANFORTH. You believe this is a step forward from the bumper sensors?

Mr. BREED. A very significant step forward in that you eliminate about 60 or 70 percent of the normal components of an airbag system—slip rings, front sensors, electric squibs, wiring, diagnostics, warning lights, reserve power capacity.

Senator DANFORTH. And is this mechanical system which works not only front-on, but at 30°, or whatever?

Mr. BREED. Yes. It works under those accidents where you desire an airbag deployment.

Senator DANFORTH. Now, the main arguments against the airbags, some people are afraid of them. They think that they deploy when you are driving down the street, or you can, you know, drive over a little bump in the road, a pothole or something, and your airbag deploys.

Would this deploy under those circumstances?

Mr. BREED. No. I reference the number of tests that have been run, the so-called rough road tests, 5-mile-an-hour barrier tests where you don't want the airbag. This has gone through all of those types of tests very satisfactorily. The sensor is actually very little different from our front-end sensors. It has a different calibration to it, but it is the same ball and tube arrangement where we tailor our response to the desired sensitivity by the same method that we do the front sensor.

So the sensor in that regard is very similar.

Senator DANFORTH. Well, thank you very much. I think that you have given us some ideas. I am particularly impressed with the thought that if you had 10,000 vehicles—if we had a relatively modest program—it would cost about \$5 million to put it in 10,000 vehicles. And the reason for doing that would be what?

Mr. BREED. We are primarily a Department of Defense contractor. Most of our business is in the munitions field. A standard program for us or, for that matter, for every commercial item, to type classify or standardize an item requires a fairly extensive fabrication of a lot of units, a very extensive testing, to get a good lot of units out in the field for extensive tests. We think that 10,000 and upward is a reasonable number, and we think that whole program, equipping 10,000 cars with a unit could be accomplished for the roughly \$500-a-car figure or \$5 million.

Senator DANFORTH. When would you be ready to do that? If the Government called you up this afternoon and said, well, Mr. Breed, we are ready to go; we have got the \$5 million, and we are going to buy this. What would you say to them?

Mr. BREED. We're ready to go now. We have a rate of effort that is going on at about \$100,000, maybe \$150,000 a month of effort on this new airbag system.

Senator DANFORTH. But I mean, you could start putting them in cars immediately?

Mr. BREED. We could start the test program, the—you see, you have to go through an extensive program of temperature involvement and vibration testing, just a multitude of tests which burn up large amounts of engineering effort. This is what has to precede any large-scale test in the field.

That portion of the program could commence immediately.

Senator DANFORTH. When would the cars be ready, the 10,000 cars?

Mr. BREED. We estimate within a year, we could have most of those 10,000 cars out.

Senator DANFORTH. Then how long would it take to give those cars a fair run? I mean when would we be ready to put them in cars that people can buy?

Mr. BREED. At the conclusion of the 10,000, as I have mentioned, I believe, in our submitted testimony, we could produce—we would have tooling in place that could produce additional units at about \$200 a car, and I think there is a market for a driver-side system at \$200 a car.

So my feeling would be at the end of a year, you are going to have enough sufficient data available that purchasers in certain selected groups would be quite desirous of putting in more units in cars.

Senator DANFORTH. How soon could we get to 1 million cars?

Mr. BREED. Production line and tooling for 1 million units takes almost a year to put in place, once you start. Then it takes almost another year—

Senator DANFORTH. So if the Secretary were to call you this afternoon and say we are ready to go, what would that mean?

Mr. BREED. Well, you have 1 year to get the first program out, and you have another year to get the production line in place, and then you have kind of a validation phase. So you are talking 2 or 3 years.

Senator DANFORTH. What do you think about this, Mr. Ditlow?

Mr. DITLOW. I think it is a tragedy that we are not taking the steps to put airbags in cars right now. If we put a crash program in place, we could have that million cars started on the road. It is now the 1985 model year—so starting in place by the 1987 model year, and we could finish the job by 1988.

Senator DANFORTH. What do you say, Mr. Breed? Is that right?

Mr. BREED. Well, I still—you need 1 year to get to your 10,000 to prove out the system. Then you need a year to production tool the thing, to get a line in place, and then it takes another 6 to 8 months to begin getting units to roll and get them into the automobiles. So you are talking, I still say, 2 to 3 years from the time you start.

Senator DANFORTH. About 1988, somewhere around there.

Mr. BREED. I think that is a fair estimate.

Mr. DITLOW. One other thing we have to recognize, Senator Danforth, is that as good as the Breed system is, I am sure that there will be competitors that come up and some in-house sourcing, particularly by General Motors.

Senator DANFORTH. Thank you very much for your testimony.

The final panel is Mr. Charles Hurley, executive director, National Safety Council, and Mr. Earl Eisenhart, director of legal services, American Association of Motor Vehicle Administrators.

STATEMENTS OF CHARLES HURLEY, EXECUTIVE DIRECTOR, NATIONAL SAFETY COUNCIL, ACCOMPANIED BY HARRY N. ROSENFIELD, GENERAL COUNSEL; AND EARL B. EISENHART, DIRECTOR OF LEGAL SERVICES, AMERICAN ASSOCIATION OF MOTOR VEHICLE ADMINISTRATORS

Mr. HURLEY. Mr. Chairman, we are pleased to be here today. With me is Harry Rosenfield, general counsel of the National Safety Council.

The National Safety Council strongly supports the decision of Secretary of Transportation Elizabeth Dole on occupant protection. It is our hope that this decision marks the end of the 15-year era of confrontation and stalemate and provides a sound framework for cooperation and progress on these important issues.

The long belts versus bags fight has been of more benefit to the lawyers than to the American people. The best feature of the 108 rule is that it virtually guarantees progress in occupant protection. Progress will come either in the form of implementation of passive restraints and belt and safety features, such as the friendly interior, for the widespread enactment of mandatory belt use laws.

Continued stalemate is not an option under the Dole decision.

There are, however, two areas of concern to the council we would like to discuss today. The rest involve the provision of the standard that repeals the passive protection requirements if two-thirds of the American people are covered by mandatory use laws. This seems to be based on the erroneous assumption that either passive restraints or mandatory use laws are panaceas regarding occupant protection.

We do not see the issues that way, and strongly believe both requirements are necessary to make comprehensive long-term progress. We do, however, see this as largely theoretical. It is our judgment that relatively few States will follow the outstanding leadership displayed by New York within the phase-in period of the rule.

Sadly, it might have been possible to get more States to enact such laws if the two issues had not been pitted against each other. If these judgments are correct, we will see in the short term a few belt laws and a lot of passive restraints. In the long term, it is our hope that we will see full coverage and implementation of both approaches.

It must be emphasized that, even assuming full implementation of the automatic restraint standard beginning in the 1987 model year, significant occupant restraint needs remain unmet. Specifically between now and the late 1990's, when the standard would be 90 percent effective, the Safety Council estimates that up to 100,000 front seat passengers will die sitting on their safety belts.

The standard does not address restraint needs of rear seat passengers, nor the special needs of young children, and lap belt usage would still be desired to make the airbag more effective in preventing fatalities and severe injuries.

We hope belt laws would also be most helpful in greatly reducing the disconnect rate of those passive belts that are likely to be easily disconnected.

The National Safety Council has long been an active supporter of State belt laws and will continue to do for these reasons. We intend to make it clear to the States, however, that they should include language indicating the clear intent that their actions are not aimed at overturning the Federal standard.

The second area of concern is the \$40 million joint public-private program announced by DOT to encourage State enactment of mandatory belt use laws. Although initial pronouncements indicated the program would also erase passive restraints, virtually all recent statements by DOT make clear the sole focus will be on mandatory laws.

As the previous statement would indicate, the National Safety Council believes this to be a serious mistake. In order to bring about the smooth implementation of the entire 208 standard, any information program should be comprehensive in scope. The introduction of large numbers of passive restraints into the marketplace is likely to occur in the near future, perhaps in advance of the phase-in schedule.

The passive systems have, sadly, been the subject of considerable controversy and some misinformation over the last 15 years. The American people have, therefore, need for, and perhaps a right to, straight answers on what they are, how they work, why they are a good deal, and their limitations as the implementation of the Federal standard goes forward.

Limiting the focus of the public information program to belt laws only also has the effect of delaying the smooth implementation of the standard by prolonging the belts versus bags tensions among the parties at interest. A comprehensive program could also tie into the related implementation of the child passenger safety laws now in effect in all States but Wyoming. As a matter of fact, Wyoming has legislation that is making progress, and we hope that within the next year, all States will be covered.

For these reasons, we strongly recommend that the Department of Transportation rethink its position on the scope of the \$40 million program.

In conclusion, the policy of the National Safety Council is clear. We support all efforts to increase occupant restraint usage, active-passive, adult-child, voluntary and mandatory. Enactment and implementation of a comprehensive program is essential to lasting progress in this arena. We stand ready to support efforts to achieve that end.

We would also like to again commend you, Mr. Chairman, and Senator Lautenberg, for your combined leadership which was absolutely instrumental in achieving the 21 drunk driving and child passenger safety legislation in June, and we obviously would continue to work with you on these important issues.

Senator DANFORTH. Thank you, sir.

Mr. Eisenhart.

Mr. EISENHART. Thank you, Mr. Chairman.

The American Association of Motor Vehicle Administrators is pleased to have the opportunity to comment at this oversight hearing. AAMVA is the association of U.S. State and Canadian provincial officials responsible for the administration and enforcement of laws pertaining to the motor vehicle and its use.

First, let me say, Mr. Chairman, that our association commends you for your interest and your leadership in the field of motor vehicle administration and driver control. We particularly appreciate your efforts during this legislative session in the critical areas of child restraints, computerization of State traffic records, motor vehicle theft prevention, the reorganization of the motor carrier safety functions within NHTSA, and of course the fight against drunk driving.

In this regard, we particularly wish to express our support for current efforts to secure full funding for the NHTSA 402 program to the \$126.5 million authorized for fiscal year 1985.

Mr. Chairman, we have not always found ourselves in agreement with the NHTSA, particularly in regard to Federal preemption of State safety regulation and enforcement. However, we do believe that it is appropriate to inform you and the subcommittee that under the current administrator, Diane Steed, our association has enjoyed an increasingly successful relationship with the Federal agency whose programs and objectives are often so closely related to our own.

We believe that the current NHTSA Administrator has made a true effort to reach out to constituent groups and to work cooperatively with State officials. This spirit of cooperation is evidenced, we believe, by an agreement between NHTSA and AAMVA which was signed last fall at our annual conference in Newport, RI. This agreement pledges us to work together to promote improvement in driver licensing functions, uniform laws and regulations, and increased participation in the Driver License Compact, Nonresident Violator Compact, and the National Driver Register.

Additionally, NHTSA and the AAMVA are currently working together to promote the concept of what has become known as administrative per se license revocation for motorists caught driving while drunk. We believe that this procedure which allows for an immediate license suspension or revocation based upon a blood alcohol reading of 0.10 percent—in some States 0.08 percent—or more, used together with innovative enforcement—for example, sobriety checkpoints—and public information efforts, offers perhaps the single most effective deterrent to drunk driving.

We respectfully urge this subcommittee and Congress in the months and years ahead, to support this type of cooperative State and Federal activity through adequate funding of 402 safety programs and, where appropriate, incentive grants.

We submit that the indiscriminate use of Federal preemptory authority and the use of Federal highway aid sanctions are not the way to foster a cooperative State-Federal relationship.

Mr. Chairman, we would not be candid if we did not say that there are areas in which we believe NHTSA could and should be doing a better job in meeting its enforcement responsibilities. One area which we believe is suffering neglect is in the compliance testing of motor vehicle safety equipment sold in the after-market as replacement or auxiliary parts.

The NHTSA program is, at this time, little more than a token effort. Very few resources are devoted to the program and, as a result, very few tests are conducted. In the event that NHTSA does investigate a manufacturer of such equipment, a long, drawn-out

process ensues before any possible remedial action is taken. This problem has been compounded in recent years by the increasing number of counterfeit products which have appeared in the after-market.

Under the Federal self-certification, there is no way for NHTSA to halt the flow of counterfeit or faulty equipment until some time after it has reached the marketplace and possibly endangered those who purchased it. This, coupled with an ineffective compliance testing program, means there is little the Federal Government is doing to enforce in this area.

While we believe the NHTSA compliance testing effort should be increased, we should also point out our strong conviction that the States as well have a vital role to play in enforcing Federal motor vehicle safety standards which they have adopted as their own.

A second enforcement area which we believe requires additional attention is in regard to vehicle identification numbers or VIN's. Since 1980, the VIN has been a motor vehicle's primary identifier, sort of an automotive social security number. Over the years, States have worked to include these VIN numbers in their titling records. Unfortunately, there are a number of small manufacturers who still do not comply with this Federal standard and whose vehicles do not carry a VIN identifier.

NHTSA has taken little action against these manufacturers and, as a result, the States are left to cope with the problem at the time these vehicles are presented for titling and registration.

Because State systems are automated and programmed to record a VIN number for each vehicle, this presents serious problems to motor vehicle departments in terms of administrative cost and lost time, as well as undermining the purpose of the VIN numbering system.

Another issue that has recently become of great concern to our association is that of the gray market in automobile imports. Mr. Chairman, we recognize that this subcommittee has been interested in this issue as well, and we very much appreciate that.

Currently, Federal law allows nonconforming vehicles to be imported on the condition that they are subsequently modified to meet Federal safety and emission standards. While the purpose of this is to allow individuals, such as returning servicemen, to bring into the country vehicles purchased overseas for personal use, it is apparent that gray market dealers have taken advantage of this loophole to import thousands of nonconforming vehicles each year for the purpose of resale.

NHTSA has done little to enforce the modification requirements pertaining to safety standards, and it appears that many of these vehicles may not, in fact, be made to fully conform before they are purchased by consumers.

Likewise, State motor vehicle administrators are confronted with increasing numbers of title applications for vehicles which may not meet Federal standards. We believe NHTSA needs to direct greater attention and resources to a solution of this problem, while determining whether there is a continuing need to protect the interest of servicemen and others who may have a legitimate need to import under carefully controlled conditions, a limited number of vehicles for personal use.

We are ready to assist NHTSA in working toward a solution to this problem.

Finally, Mr. Chairman, we wish to comment briefly on the current legislative initiative to reorganize the NHTSA in such a way as to combine commercial vehicle and automobile safety responsibilities into one agency. This plan would incorporate in the new agency the administration of highway safety grants, a function currently shared by FHWA and NHTSA.

AAMVA supports the concept of consolidation of highway safety programs into a single administration. We believe that such a consolidation has the potential to improve administration of the safety programs by avoiding the waste inherent in managing duplicate functions, while at the same time providing high visibility to the very important motor carrier safety program.

We stand ready to work with the new safety agency to accomplish our common objectives in truck safety. By continuing to encourage an effective State-Federal partnership of education and technical assistance, the AAMVA hopes to play a major role in realizing improvements in this very important area.

Mr. Chairman, that concludes my remarks. Thank you.

[The following information was subsequently received for the record:]

AMERICAN ASSOCIATION OF MOTOR VEHICLE ADMINISTRATORS,
Washington, DC, November 16, 1984.

Hon. JOHN DANFORTH,
Chairman, Senate Subcommittee on Surface Transportation, U.S. Senate, Washington, DC.

DEAR CHAIRMAN DANFORTH: Please excuse our delay in responding to your letter of September 29, requesting follow-up responses relative to our testimony before the Surface Transportation Subcommittee on September 19, 1984.

While it is extremely difficult to point to a single safety issue as one which is most in need of attention by the NHTSA, the question of the state-federal relationship in regulation of aftermarket safety equipment is an issue of immediate concern.

The NHTSA program of compliance testing of motor vehicle safety equipment sold in the aftermarket as replacement or auxiliary parts has been seriously neglected, and at this time, is little more than a token effort. Very few resources are devoted to the program, and, as a result, very few tests are conducted. In the event that NHTSA does investigate the manufacturer of such equipment, a long drawn out process ensues before any possible remedial action is taken.

This problem has been compounded in recent years by the increasing number of counterfeit products which have appeared in the aftermarket. Under the federal self-certification scheme, there is no way for NHTSA to halt the flow of counterfeit or faulty equipment until, what may be years, after it has reached the market place and possibly endangered those who purchase it.

Against this background, former NHTSA Administrator, Raymond Peck, in January, 1982, issued a formal interpretation which had the effect of discouraging state compliance programs. These programs had complemented the federal self-certification system and helped to assure that equipment sold in the aftermarket met state and federal standards by requiring manufacturers to submit compliance data for review.

Congress made an effort to remedy this situation in 1982 by amendment to section 103(d) of the National Traffic and Motor Vehicle Safety Act of 1966. However, the amendment, committee report language, and remarks in the Congressional Record, have left widespread confusion as to the appropriate state role.

In order to avoid a situation in which motor vehicle safety equipment, sold in the aftermarket, goes virtually unregulated, this issue needs to be addressed at an early opportunity.

In regard to your question seeking actions to encourage compliance to VIN requirements, an uncomplicated and inexpensive remedy is available. We believe that a letter from the NHTSA administrator to those manufacturers which are identified

as violators would, in itself, go a long way toward achieving compliance. NHTSA has failed to take even this simple measure. Should NHTSA move in this area, the AAMVA is prepared to do what it can to assist.

You request our judgement as to the severity of the "gray market" problem. It has been estimated that 35,000 gray market vehicles will enter the U.S. this year. This does indeed result in significant problems for state titling and registration officials who are confronted with increasing numbers of title applications for vehicles which may not meet federal safety and emissions standards. Often, these applications are accompanied by a bewildering array of foreign language documents which purport to show evidence of ownership, but which often do not establish a clear chain of title.

Our Association addressed this problem at a special session at our Annual International Conference last month in Des Moines, Iowa. We are continuing to examine possible solutions and intend to explore these further at our Registration, Title, Vehicle Dealers and Manufacturers Workshop next April in San Francisco.

Thank you, Mr. Chairman, for an opportunity to comment on these important issues.

Sincerely,

DONALD J. BARDELL,
Executive Director.

Senator DANFORTH. Thank you both very much.

Focusing on drunk driving and drugged driving, Congress has been very active in this area in recent years in providing economic incentives for States to tighten their laws and provide for automatic suspension of licenses, and the recent legislation relating to drinking age.

Where should we go from here? Is there anything else we should be doing or have we pretty well covered the drunk and drugged driving situation?

Mr. HURLEY. That is a tough question, obviously. I think the critical need is not so much through legislation, but the implementation of what we have got.

There probably is a major need now to crunch the numbers. Certain States have approached drunk driving differently, and there probably is a major opportunity to analyze what effect different provisions have had, State to State, a comparative analysis. That would be one area, I guess, of initiative. It would largely be in the function of oversight hearings.

A second area would be that the reauthorization of the 408 incentive grant program should come up next year. It would be a good time to see how that program has actually worked in its implementation and whether or not changes need to be made.

As you know, we would recommend that the Congress take a very close look at adding more performance criteria to the statute that some of the States—16, as Ms. Steed indicated, have qualified—some of the States that have not been able to qualify have excellent programs and have been somewhat arbitrarily excluded from the legislation because of absence of particular measures.

As we all know, it is not tough laws that save lives; it's tough law enforcement and implementation. And that is an area I think it would be a good time to look at in the 408 authorization.

Senator DANFORTH. Mr. Eisenhart.

Mr. EISENHART. Mr. Chairman, I would just like to agree with what Mr. Hurley said, in particular in regard to the incentives grant program. We believe that there are States out there that have programs which are as effective, if not more effective, than some that have qualified and believe that there may be some room

for loosening up the requirements or making them more flexible so that these States can also qualify.

It seems to us that in order to make the program as effective as possible, it should be more flexible, and we need to get more than 16 States involved.

Senator DANFORTH. What did you think of Mr. Breed's suggestion of a \$5 million program to put airbags into 10,000 cars?

Mr. HURLEY. Well, the Safety Council is not an engineering firm, and we are not in the business of endorsing of products, but I have to tell you this is precisely the kind of an initiative that we think ought to get strong encouragement from the Congress and from the administration.

This is the type of thing that we feel would assist greatly in implementing the 208 standard, to get some different technologies out there in the marketplace, and where the tests are absolutely real.

Mr. EISENHART. Mr. Chairman, we do not have a position on airbags. We do have a position supporting mandatory seatbelt laws at the State level. However, we share your concerns about the Federal Government lobbying State legislatures on that or any other issue.

Senator DANFORTH. Do you think the buckle-up campaigns are very effective?

Mr. HURLEY. I guess the Safety Council has been involved in that area since, I guess, the 1940's, perhaps the early 1950's anyway. It is an extremely difficult area. Progress is hard to come by, and I guess the guiding rule is that not all motion is progress. There are areas where we think progress can be made, but it is—it is not something that responds very well to advertising campaigns or visibility approaches. It is more in the nuts and bolts area of employer requirements, economic incentives, and that area.

We believe strongly that the belt laws are a great idea, and as you could hear, we believe that they are absolutely compatible with passive restraints—as a matter of fact, absolutely necessary—but we feel that any belt program has to be strongly guided by research and experience rather than visibility.

Mr. EISENHART. Mr. Chairman, I guess I would have to say that our observations have been that the buckle-up campaigns have not been particularly effective.

Senator DANFORTH. Gentlemen, thank you very much for your testimony. That concludes the hearing.

[Whereupon, at 11:07 a.m., the hearing was adjourned.]

